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ST REVIEW ISSUE 33 DECEMBER 1994



Art editor: Illustrations: Production editor: Games editor: PD Zone:

Vic Lennard Liz Maddox Paul Van Linden Judith Chapman Tina Hackett **Nial Grimes**

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Contributors:

Manfred Bäcker, Mark Baines, Joe Connor, Steve Delaney, Jon Ellis, Ofir Gal, Nial Grimes, Tina Hackett, David Howell, Colin James, Dave Jones, Iain Laskey, Günter Minnerup, David Nilson, Jane Plessey, Mike Robinson, Paul Rossiter, Graeme Rutt, Ian Waugh, Richard Williams, Andrew Wright.

Photography:

lan Fox Hannah Gal

Ad managers: Ad production: Marketing manager: Marketing assistant: Production manager: Circulation director: Commercial director: Emma Barr Barbara Newall Lucy Oliver Glen Urquhart Sandra Childs David Wren Denise Wright

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Fax: 0625 850652 Tel: 0625 878888 email: streview@cix.compulink.co.uk

Chairman: Managing director: Derek Meakin Ian Bloomfield

Distribution:

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Telephone:

0895 444055

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South Wirral L65 3EA

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EASY DTP



Desktop Publishing - the very phrase has a magical ring to it. Whether for fun or small business Easy Text Professional, our cover disk giveaway, will move you into a world in which you can be as creative as you wish – and yet derive immense enjoyment.

PAGE 12

Whether you wish to create stationery, newsletters, leaflets or just to have some fun looking at your printouts, Easy Text Pro will deliver the goods. And we're backing it up with nine pages of editorial over the next four issues.

If you also want to see how the other half (or .001%) lives, then make sure you read our feature on the Medusa and DA's Layout which starts on page 35.

Double-click on the installation program and start to enjoy!

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... the source of all information! This is where you'll find the best tutorials, your opinions, hints 'n' tips and our answers to your questions...

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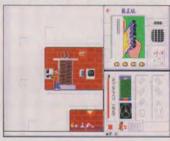
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Zero-5 – is it the ultimate space shoot-'em-up? Read our preview on page 55.

Find out about our H.E.R.O. with our preview on page 50.



ON THIS MONTH'S COVERDISKS

EASY TEXT PRO

... the easy-to-use DTP package for all STs with 1Mb or more of memory, colour or mono.

This is the full version (aside from a few fonts and support files) and includes support for almost every printer in existence from 9-pin dot matrix through to lasers. You can import clipart and text files in a number of different formats. There are also a large number of fill patterns, vector shapes and text styles.

Our tutorials start on page 12...

STEREO CAD

... exclusive ST Review demo version of this excellent stereogram creator. See page 25 for our tutorial.



WELCOME...

... to an issue of ST Review with quite a few changes. But first, an apology. The Family Roots program on last month's cover disk had a corrupted section. If you've tried to print your tree, you'll have been greeted with a screenful of bombs – not quite the right idea. I've included FAMILY_T.PRG on our second cover disk this month; replace last month's file with this one and get printing!



Now down to business. Your first reaction to this issue may have been that it feels a little heavier – eight pages so in fact. Five of those pages have gone into **ST Action**, acquired from **ST User**. Our games coverage is now being both increased and improved – and includes a sustainable four-page Jaguar section, **Jagged Edge**, to keep you in touch with the best games console on the market.

On the serious editorial side, there is little difference, although I would like to welcome two new writers, again from ST User. Günter Minnerup has previously been a major contributor to both ST World and ST User while Richard Williams is a former publisher of the latter. Both now have regular pages in ST Source.

Our main cover disk is a stunner – Easy Text Professional is on a par with the best programs ever seen on an ST magazine cover. It's the full version apart from a couple of fonts and a few ancillary files. We'll be taking you through lots of practical examples over the next four issues. Next month continues our drive to bring you excellent commercial products allied with exclusive versions of the latest games. You can look forward to Harlekin 2 and Obsession, as previewed in this issue.

We'd like to think that this mag offers a decent read for everyone, irrespective of their interest. With the improvement to the games coverage, I believe it is fair to say that ST Review is the only ST magazine that any ST enthusiast needs to buy. We bring you the best product reviews, and usually months before any other magazine, a good selection of tutorials and place the facts about your machine at your fingertips. Please don't run the risk of missing us – subscribe, especially with our excellent three-month direct debit deal, or place a regular order with your local newsagent.

But **ST Review** is certainly not perfect, and I'm sure there are aspects you'd like to see changed. Just drop me a line...

V. Lermond

Vic Lennard, Editor

MAC MAGIC

Attentive Atari users visiting the *MacWorld Expo '94* trade fair at Frankfurt at the end of last month should have noticed something strangely familiar on some of the monitors at Apple's own stand. The program in question is *MagiC World Pro* for the Mac – Behne & Behne's own pre-emptive multitasking operating system revamped for Macintosh computers. According to Wilfried Behne, any cleanly-written GEM programs, and even the likes of *Calamus*, should run under *MagiC World Pro* on machines with a Motorola 68020 processor upwards. A version for the Power Mac should be ready for the next CeBIT show.

The VDI and multi-tasking aspects are up and running but *MagiC's* AES is not quite ready, hence the mocked-up screenshot. And there's even talk of a development tool to convert GEM source codes for use on the Mac...



Split personality – could this be how Calamus will appear on the Mac's desktop?

TOP TAKE TWO

Gasteiner Technologies (0181 345 6000) has just announced the Top Link Mark II, a DMA to SCSI adaptor for the ST/STe. The unit is similar to the ICD Link II, except that it comes with the DMA to SCSI cable attached. This latest revision is said to operate at about one and a half times the speed of competing products at a cost of £69.

Also new from Gasteiner is a 16Mb RAM card for the Falcon. It comes with a single 16Mb SIMM (as used on the Apple Macintosh) rather than four 4Mb ones and fits under the Falcon's shielding without the need for any cutting. Costing £499, users can "trade in" their existing 4Mb board for £100 against this price.

PLAY THE GAME



Getting back into the football season? Then check out IDS's forthcoming release, *Team*. You can choose the tactics that team uses, their kit, set the weather and play good old-fashioned hard football as your men run around the field.

Team looks set to be a cracker with a refresh rate of 50 frames per second, hardware scrolling and 50kHz, 8-bit stereo DMA sound. Preview and a feature on the programmers next issue.

Oh my word – the goalkeeper's missed it!

XMAS CHEER!

ST packs still available at incredible prices ...

time to buy a new ST or change your old STFM for an STe. With the Falcon currently outside the reach of the average user and Amigas in short supply following the collapse of Commodore International, the ST is the only affordable computer for home and small business use. The old "Power Without The Price" slogan has never been more true than it is today, since you can now pick up a 1Mb STe for £200 or less.

WELL SUPPORTED

Some users have been reluctant to buy a new ST due to the fact that several software producers have stopped releasing their latest titles for the machine. While this is true to a certain extent, there remains a dedicated band of companies who still release ST software on a regular basis. Compo Software, System Solutions, HiSoft, JCA Europe, Floppyshop, FaST

The STe is still unrivalled as a general, all-round home computer. It really is excellent value for money.

Karl Brandt, System Solutions.

Club and CGS Computerbild, to name but a few, have all released new software packages this year, and that's only on the applications side. We've seen some great games from IDS, Caspian Software, Merlin, Gremlin, Daze Marketing and others. New hardware for the ST range is more than plentiful with everything from low-cost hard drives and multisync monitors to processor upgrades, high-speed modems and genlock devices. If it's a replacement disk drive, TOS 2.06 upgrade, monitor cable or simply a new mouse you require, you will have no problems obtaining them. What's more, System Solutions, Compo, Ladbroke and a number of others offer a professional repair service if your ST goes wrong - and they can also install the various hardware gadgets for you too.

On the games side, a number of the big name titles from the past have been re-released with a lower price tag on the Kixx and Hit Squad labels in recent months. Many firms are re-packaging their back catalogue titles at budget prices, offering you much better value for money. If that's not enough, here at ST Review we will continue to offer the best in PD. shareware and commercial software on our monthly cover disks and continue to give you the most accurate coverage of all the latest releases. Last but not least, we cannot discount the hundreds of quality programs available from the PD libraries. Although they cost just a pound or two per disk, you should be careful not to dismiss them. The best examples of these include the latest German shareware titles such as Edith Professional, GEMView, Selectric, Two In One, GEMSpool and Kandinsky, all of which are now being supported in



Masterful discovery - pick up either the Discovery or Music Master packs at excellent prices this Christmas.

the UK, with the option of making payment in pounds sterling to a UK address.

FIND A DEAL

We contacted a number of leading suppliers as we went to press and were glad to hear that they either had adequate stocks of STs or were expecting delivery of their next consignment. All the companies we talked to were offering software bundles with their machines but the available packages differed from one supplier to the next.

Here's a few examples of the best deals we found. System Solutions have the 1Mb STe Discovery Xtra Pack in stock at £249 but can upgrade it to 2Mb for £319 or 4Mb for £379. A Steinberg Pro 24 bundling deal is also available. Compo Software didn't have the STe in stock when we called but were offering the 520STFM at £159 or

upgraded to 1Mb for £199, 2Mb for £249 or 4Mb at £279. Compo's STFMs are currently being bundled with the Discovery Pack. Meanwhile, Gasteiner Technologies is stocking the 1Mb STe Family Curriculum Pack at £199 but can upgrade it to 2Mb for £250 or 4Mb for £320. Last but not least we have Silica Stores, currently the only High Street store supporting the ST. They have a number of outlets throughout the country and are mainly located within branches of Debenhams. They are offering the 1040STe Music Master Pack at £200 or upgraded to 4Mb for £300. The 520STe Starter Pack is another option at £250. They also have a number of 520STFM Discovery Packs in stock at £130 or £150 upgraded to 1Mb.

Whether you want an ST as an educational tool for your children, a business tool for your work or simply to enjoy the latest shoot-'em-ups, give these companies a call – now!

THE PEAK OF DESIGN

Titan Designs (021-414 1630) is ready to release *Apex Media*, its true colour animation and graphics program for the Falcon. By programming specifically for the Falcon's DSP, unparalleled performance can be achieved on an Atari computer.

The Morphing option smoothly transforms one image to another while the powerful block functions allow complex animations to be produced quickly and easily. Post-processing of these can use noise reduction, dejagging or motion blur for smooth transitions between frames. Advanced Delta Data compression allows large sequences to be produced on a 4Mb Falcon.

The digitising tool allows single or multiple frame capture from real time moving video in 16-bit true colour. Rostrum camera work stretches the system further by providing a 24-bit capture facility.

Special features such as graduated circles, lines, rectangles and interpolative polygons, all drawn in real-time, are supported. For realism, *Apex Media* supports a true airbrush that processes the background image to transform the colour being used to produce a graduated spray effect.

Image Processing can be used in real-time for the post-production of true colour images to achieve a more natural (or bizarre) effect. Transforms or masking of certain areas permits hue, saturation and brightness settings to

be defined prior to the selected area being painted or filled to the required colour. Analogue transforms and masks can be used in conjunction with an

extensive range of brushes – simply select the function and paint.

The Real-time zoom can even be used during the replay of animations. Every single tool is fully usable under zoom conditions, including the realistic airbrush and Image transforms. The ability to draw while moving smoothly around the canvas under zoom mode provides the user with pixel accuracy.

Check out our preview on page 33. Introductory price is £119.95; *Apex Media* should be available towards the end of October 1994.

Simply stunning – Apex Media promises to take the Falcon's power to the limit.



IN THE MONEY

Massive cash injection as Atari and Sega settle out of court...

The dispute between two of the major computer industry companies has finally been settled, resulting in a \$90 million for Atari. It had been alleged that over 70 patents had been infringed by Sega including the design of the 9-pin joystick port, as featured on its Mega Drive, and various software algorithms.

STRONG AGREEMENT

Sega will buy 4.7 million shares for around \$40 million, giving it an eight per cent shareholding in Atari. But even with the twenty-seven per cent held by Time Warner, the Tramiel family still hold in excess of fifty per cent of the shares. Additionally, Sega will pay a further \$50 million for the

non-exclusive right to use many of Atari's extensive library of patents for the next seven years, and this includes Sega's subsidiaries, licensees and customers. The upshot of this was an immediate rise in Atari's shares of \$1.25, giving Sega a tidy return on its investment.

Perhaps more significant is the fact that the two companies have entered into a various software license agreements to ensure that a number of games are made available on all existing and future machines. This is likely to lead to the likes of *Daytona* and the *Virtua* series appearing on the Jaguar while Sega can look forward to access to games such as *Tempest 2000* and *Alien v Predator*. However, it appears likely that *Sonic*

will remain a Sega-only supporter!

"We at Atari are very pleased with this new affiliation." said Sam Tramiel, president of Atari Corporation. "The increased cash position will be used among other things to enhance our marketing position this fall."

All capital will be put into sales and marketing of the Jaguar and while Atari Europe has not yet been allocated funds, it seems reasonable to expect that it will be able to satisfy demand for the Jaguar on this side of the Atlantic

Scratch, scratch – the sharing of titles between Atari and Sega is unlikely to include Sonic...



JAG MAG

At least one magazine publisher looks set to launch a Jaguar-specific title within the next few months. Paragon Publishing included a 16-page supplement, entitled Jaguar Advanced Gaming, with issue four of its multiformat title Games World and are considering launching a stand-alone title next year. An additional 18,000 copies of the supplement were being distributed by Rumbelows, one of the main Jaguar stockists.

The supplement was prepared in co-operation with Atari, Virgin and

others and contained details of many new games scheduled for next year, some of which had not been heard of previously.

Paragon played down the imminent

Paragon played down the imminent release, saying that nothing had been decided yet and that it would "see how the market develops". It added that the supplement had been put together in an effort to gauge the response if such a route were to be followed. If the title does go ahead, the first issue is expected around Easter. Paragon is looking to obtain Atari's seal of approval for the magazine and hope that it will be adopted as the "official" Jaguar publication.

ARE YOU A PLONKER?

Dunces Cap Software's latest game is the curiously-named *Plonker!* It's based on the age-old memory game where you click on a box to view the symbol hidden behind it and then click on another in the hope that both symbols match. If so, the boxes remain open, otherwise they both close. *Plonker* features colourful graphics, clear digitised speech and sound effects, and countless variations on the standard game.

There are 70 levels of play, based around five themes, and include lucky dips, bomb bonus rounds and two hidden puzzles. *Plonker* costs £9.99 and is presently available directly from the author. A playable demo containing ten of the seventy levels is available from most PD libraries; 1Mb of memory is required. To order a full copy of *Plonker*, send a cheque or P.O. for £9.99 (payable to D. Cobbledick) to Dunces Cap Software, 245 Rosalind Street, Ashington, Northumberland, NE63 9AZ.



What a plonker

- I may have
finished this
level but the
bomb in the
bottom-left
square has
just cost me
500 points!

IN BRIEF

- Independent software house Renegade has been bought by Warner Interactive Entertainment, a division of the Time Warner group. Renegade is best known as being the company behind the Bitmap Brothers releases over the past couple of years.
- Arnor (01733 68909) has made aggressive price cuts to its word processor, Protext. The current release, version 6.5, is now just £74.95 and upgrade prices have also been reduced.
- Golden Image has a new mouse mat/scanner pad. A transparent cover holds pictures steady while scanning and the unit includes a built-in ruler. Cost is just £9.95. Golden Image's new address is 65 Hallmark Trading Estate, Fourth Way, Wembley, Middlesex HA9 OLB. For further information call 0181 900 9291.
- The two Dunces Cap Software releases Stark Raving Bonkers and Reflex Action are now being jointly distributed by GL-PD and

Merlin. For further information on either product, call GL-PD on 01792 799762 or Merlin on 01453 882793.

- The Third Dimension is a 3D Construction Kit user group that produces a monthly disk mag. This includes tutorials, letters, problem pages and all kinds of 3D data for £1.50 per issue. More information from Tony Hartley (01484 460888).
- Bob Yates (01602 333303) runs a non-formal Calamus user group that publishes a contact list for members, including brief info on each person's set-up. This allows clipart, PD fonts and the like to be swapped and the possibility of a helping hand at the end of a telephone. Call for a membership form.
- The Manchester Atari Group (MAG) has now been launched with an annual membership fee of £3. Benefits include PD software at 50p per disk, a monthly MAGdisk or MAGazine for 80p and free telephone, e-mail and postal support. Contact Denesh Bhabuta on 0161 796 5864.



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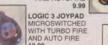












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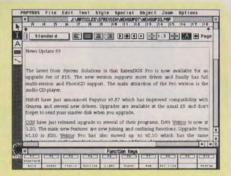


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COMMERCIAL

Report by Ofir Gal

We review one of System Solutions' (081-693 3355) products and what happens? It gets updated! ExtenDOS Pro is now available for an upgrade fee from ExtenDOS of £15. The new version supports more CD-ROM drives and finally has full multi-session and PhotoCD support. One of the main attractions of the Pro version is the audio CD player – check out the CD-ROM feature on pages 30 and 31.

From HiSoft (0525 718181) we have *Papyrus v3.57* which boasts improved compatibility with *Geneva* and several new drivers. This version of *Papyrus* is already compatible with the forthcoming *NVDI 3* which will be available shortly. Upgrades are available for the usual £5 – and don't forget to send back your master disk when you upgrade.

CGS (081-679 7307) has just released upgrades to several of its programs. *DA's Vector* is now at version 1.20 and has a couple of new features, namely joining and outlining functions. The upgrade from v1.10 costs £20. *Vector Pro* has also moved up to version 2.10 and has the same enhancements as the standard version, with the addition of two new animation filters and a monochrome image tracing facility. Upgrading from version 2.00 costs £25. The *DA Know How* kit is also available free of charge to existing users.

Finally, also from CGS, DA's Picture 1.10 includes a new module that allows you to rotate images. A special anti-aliasing filter is used to ensure that the image integrity is maintained throughout. The cost? A mere £20...



And about time

- DA's Picture,
arguably the best
photo-retouching
program for the ST,
can now rotate
images, a feature
many users have been
waiting for...



Hear me – ExtenDOS Pro offers multi-session PhotoCD support and the all-important audio CD player accessory!

PD AND SHAREWARE

Report by Nial Grimes

Most shareware programs these days come with acres of documentation and printing them all out can take forever. *Idealist* is the perfect tool for crunching through these vast amounts of text and not only do you get more information on the page, but it usually looks a lot better to boot. Version 3.5 includes support for *GDOS* (and *SpeedoGDOS*) printing, compatibility with RTF and *1st Word Plus* files, and plenty more besides.

More details on *Speed of Light 3.5* are emerging and it looks to be quite a major upgrade. True-colour picture conversions are much improved thanks to "Octree" colour mapping, multiple files can be loaded through *Selectric* and there are numerous other tweaks to the interface and the speed of the program. Registered users can also look forward to warping facilities and a whole range of image-processing filters.

GEMView 3.08 also hits the streets this month. The history log doesn't reveal an astounding range of new features, but the slightly shaky thumbnails facility has been stabilised and some problems with displaying resource files have also been vaped. It's nice to see that Dieter is keeping on top of these minor niggles!

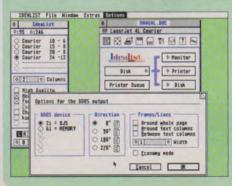
On a more mystic note, *OMEn 2.5* makes its debut this month. Bug fixes are once again the order of the day and a number of features for programmers have been also squeezed in. The documentation has been revised and is now supplied in *.TEX* format. Don't get too excited though – there are reports of problems when running this version on certain machine configurations. Give it a go by all means, but don't trash the old version just yet. And on a more positive note, *ZX-Spectrum 2.07* is starting to appear on the *Internet* – time to dig out *Knightlore* and *Manic Miner* again folks!



Picture the scene
- GEMView 3.08
returns with improved
stability and updated
documentation.

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UTL.4536 HP DESKJET/LASERJET SUPPORT DISK 2 - Even more useful

utilities to help you get the most out of your Hewlett Packard printer.

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FALCON 030 SECTION

ART

F.4786 ARROW 24 - An easy to use GEM based mode and package. Leaves POV standing! NOTE: Program and docs a PLAY - Plays MPEG real-time movie files. TGA VIEW - Docset and the package of the program and the program and the package of the package of

FLL TC32 - Plays FLI animations from True Colour mode. DGRAPH - to early version of a new art package. RGB ONLY, EASY POV - A DCC COMP.

F.4787 BV3 from Binaris - A VERY fast GIF and TGA file viewer and converter using the Easy GEM interface. GIFs load in seconds from floored Lots of pictures supplied on disk.

S-F.4508, S-F.4509, S-F.4510 & S-F.4511 PHOTOSHOW DEMO - Incredible collection of photographs put together to demonstrate the powerful effects of PHOTOSHOW, £9.00 for the set.

F.4573 DEMENTIA by Avena - Plasma effects, 3D objects, keftales, semapping and more, RGB, Needs 4 Meg.

F.4619 STRANGE CIRCUMSTANCES by New Trend - True Color overscanned raytraced backgrounds, 3D objects, stereo sound and more! RCB

S-F.4667 & S-F.4668 CYCEDELIC KNOCKOUT by The Mugwumps-Techno demo from the Fried Bits competition. Needs 4 Meg and a hard drive £4.50 for the set.

S-F.4669 & S-F.4670 AUTOWASCHEN VERBOTEN by Lazer - Best Falcon

S-F-4009 & S-F-401 ACT DAY ASCELLA demo so far, RGB, Needs 4 Meg and a hard drive. £4.50 for the set. F-4785 PLASTIKK VIBRATION by NPG - Another Fried Bits II entrant. Los of 3D effects with a techno/rap soundtrack. RGB, Needs 4 Meg and a

GAMES

F.4456 SHANGHEI V2.0 - Perhaps the best implementation of Mah Jong and date. VIERFREI - A variant on the card game patience which has 99999 startup positions! MEGATRON - A 2 player light cycles game with 25 levels. Three more games on disk!

F.4579 BLACK HOLE - Areade action with lots of digitised sound. Can you find the coins on each level that hold the key to the next? Watch out for the time bomb, though! VGA, needs 4 Meg.

F.4779C STARBALL - A futuristic Pinball game with great sound, graphs and several sub-games. This HD version features several more digitised tracks than the ST version and is Falcon enhanced.

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F.4781 SHOCKER 2 - House of Games - The Falcon specific version of a great game of skill. Many levels available and lots of puzzles to solve TOMTAR - A crazy fast action blast 'em up with a machine gun!

PROGRAMMING

F.4784 JPEG4SRC - The complete C source and docs to the latest revision of the JPEG file format. FALCON LIBRARY - An impressive collection of well documented assembler sub-routines (Devpac 3 format) for use in your own programs. WIN LIB PRO - C source for a slick new 3D Desktop. Still under

development but plenty of does and source.

F.4724 EASY GEM LIBRARY - Everything you need to add an impressive futuristic front end to your own GEM programs. Includes full sources in Pure C format.

UTILITIES

F.4554 DMV BOOT, POVSHELL 2.1, EASY DATA, PRIMA 2.1, TOCANTE, TRUEDISK 2.2, XTASK V2.0, SPECTRUM EMULATOR

F.4555 AHDI CONFIG, ARROW FIX 1.3, BROWSER, EVEREST 3.3, CD-ROM DRIVER, GAMEFIX, GAPOSCAN, ICONEDIT, OCR, TOS4TRAP.

F4632 AL2SWTC2, AHDI2IDE, ARC2LZH3, ARJPACK, BARCODE BOOT_TOS, CACHE, CHOOSE INF, DUPLI, FLC BOOT, FUSS, GFA_PTCH, NVR_CTRL, OTTOLOD, OVERDSK4, PCMOUSE, SM_BLASTER, STE2FALC, TAV_OVRS, VIDEL, VMEM, OVERCADR, F.4727 HPLJ4L - Gives you full control over all the features of the HP LASERIET 4L from within an easy to use GEM program. Lots of downloadable fonts included.

F.4782 ASSIGN-ED, BMAPFIX2, CAT, SET TIME, CPXSPY DOPPELCLICK, EGALE, DR BOB'S ICON EDITOR, POWER MOUSE SPLITTER, TERMINAL BLANKER, TOS 4 FIX, VERICARD, WHATIS.

F.4783 ARCDRIVE, BIRDS WINGS, EDOS PATCH, FILY4, DR BOB'S ICON PAGER, SYNERGY DEPACKER, PACKSHELL, ROMSPEED, SET MEMTEST, STDCAT 5.3, STE2FALC, STOOP, STOSFIX3, SYSINFO, TURBO VEILLE, WAKE UP, THE WINNERS' ENCLOSURE.

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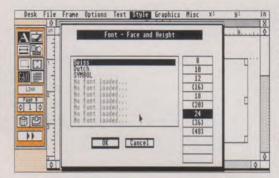
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Slick documents
are simple to
produce with our
fabulous cover
disk giveaway!
Nial Grimes slips
on the Brando
shades and puts
the pedal to
the metal with
Easy Text
Professional...

EASY RIDER

ast your mind back to the very first moment you saw word-processed text pouring out of your printer – magical, wasn't it? Desktop publishers magnify that feeling by allowing much more complex documents to be realised with the help of an ST, and you are now the proud owner of just such a piece of software thanks to ST Review.

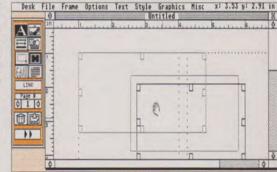
Easy Text Pro is a fully-featured DTP package, capable of producing anything from party invitations to invoices or school magazines. The version on the cover-disk is 100% operational and comes complete with drivers for most popular printers



The typeface of selected text can be changed easily through the fonts dialogue box.



The right mouse button can be used to switch between frame draw and edit modes.



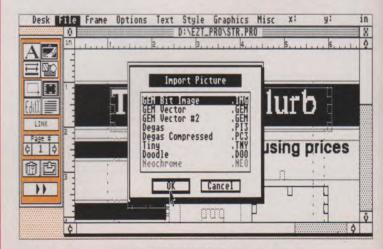
- dot matrix, laser and inkjet. What's more, all you need to unlock the potential of this fabulous freebie is contained within the following few pages - enjoy!

PANEL BEATING

Easy Text Pro is similar to most other desktop publishers in its approach towards layout. Everything positioned on the page must be contained within a frame and it's here that the icon panel at the left-hand side of the screen comes into play. The top section deals with the four frame types: text, graphics, line and vector object. Just below are the two mode icons that allow you to choose

whether you want to draw a frame or edit it.

Just as a quick demonstration of frame technique, let's put something on the screen. Select the vector object icon, put the mouse pointer over the document window and drag a nice large box (just click Icon help under the Misc menu if you get confused about the names of the icons). To move the box around the screen, simply click the right mouse button and drag away! As you've probably already guessed, the "handles" at the edge of each frame are used to change its shape. The mouse is relatively clumsy when it comes to finely positioning or sizing frames and you might find it useful to



Easy Text Pro supports most mono image formats, including the all-important .IMG.

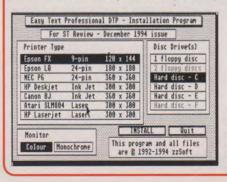
READ ME FIRST!

Easy Text Pro will not run directly from the cover disks, but fear not – the installation procedure is about as simple as they come. You will need an ST with at least 1Mb of RAM and four blank formatted disks (marked System, Fonts, Documents and Overflow) to complete the process.

- Before you start, use STRBAKUP.TOS from a previous month's disk to make a back-up of both cover disks. Put the originals in a safe place.
- The first step is to run the installation program on disk 1. Double click on INSTALL.PRG and a dialogue box will appear after a few seconds.
- You need to make three decisions at this point the type of printer you want to use, the kind of screen display and where you would like to install the software. Having made these choices, follow the on-screen prompts and change floppies when asked.
- Now click on the "Reboot" button to install GDOS (place the Fonts disk in drive B if using two floppy drives) and if you are using a colour monitor, switch to medium resolution when you reach the desktop.
- Finally, double click on FONT_WID.PRG (which can be found in the PRO folder on your chosen partition if you are using a hard disk).
- That's it! The program itself can now be used by simply double-clicking on EZT_PRO.PRG. Should you want to reinstall the package, you must make a fresh copy of the original cover disks.

Now might be a good time to test the installation, so put cover disk 2 into the drive, select "Load" and double click on BLURB.PRO in the ETZP.TUT folder. Within a few seconds a page of text and graphics should appear. If you are using a mono monitor, a dialogue box warning you that the file was created in medium resolution will be displayed; this is perfectly normal – just prod the "Continue" button.

Follow your nose through the "Print" dialogue box, accessed through the "File" menu, and insert cover disk 2 when the program asks for the "Document" disk. After a short burst of disk activity, a beautiful document will emerge from your printer. The following three pages will provide you with all the information you need to produce publications just like this one!



To install the package correctly, highlight your printer, type of monitor and disk drive set-up...



STEP BY STEP GUIDE

FRAMED!

Still stuck? In that case. let's run through the basics...



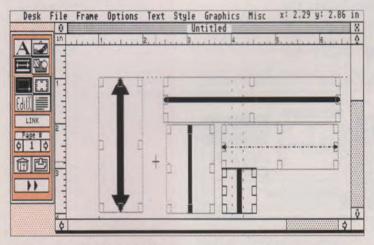
Start by clicking on the "Draw frame" icon (so that the mouse pointer becomes a cross) and drag a reasonably large text box in the document window.



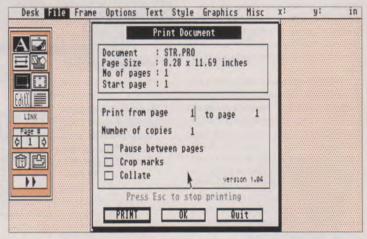
Next, click once on the "Edit" icon and again in the frame vou've just created. Type something highly relevant - "Hello World!" will do ...



Drag the cursor over the words and then click "Font" in the "Style" menu. Make a few changes and you should end up with something like this



Lines automatically adjust themselves to the shape of the frame and a number of different styles are on offer.



Be sure to save your work before printing - output is handled by a separate program to conserve memory.

enter exact measurements through the Coords dialogue box instead (sneakily hidden under the Frame menu).

You'll notice that as each frame is selected, the icon panel changes to reflect its type. Even so, the best policy is just to create frames as you need them; a clutter-free document is far easier to work with. Now that the basics are under your belt, let's take a look at the four frame types in more detail.

TYPE POOL

Text forms the backbone of most documents and as you'd expect, a good range of typographical tools are on offer. The simplest way to get some text onto the page is to highlight the Edit icon and type directly into a frame. The size and style of the characters can be adjusted by dragging the mouse over a few words and using the Fonts dialogue box to choose the new typeface. A document from disk can also be loaded into a frame by clicking Import from the File menu. Most popular text formats are handled, but if you do run into problems, just be sure to save ASCII text from your

word processor. Graphics frames follow a similar pattern. Although it's not possible to edit or create a picture internally, the same Import menu item can be used to drag external images into your document.

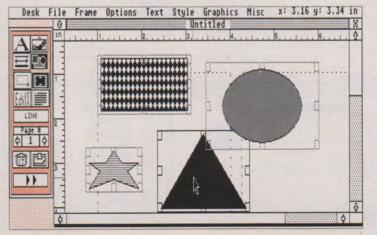
Once again, you'll find that several formats are supported and you might like to dig out GEMView again to deal with colour images - a feat that is slightly beyond Easy Text's abilities. With a picture frame highlighted, the lower half of the Graphics menu comes into play. Crop picture can be used to remove unwanted portions of an image, while Size optimisation is handy in dealing with the aspect ratio. We'll take a closer look at these more advanced functions in the months to come

In addition to text and graphics, Easy Text also boasts a range of vector drawing tools. These fall into two categories, shapes and lines, and you can switch between the two by clicking on the appropriate button in the icon panel. A wide selection of different shapes and tints can be selected through the first three entries in the Graphics menu and these options work before or after the frame is actually drawn. When it comes to using lines, exactly the same principles apply - Easy Text Pro automatically picks up whether you want to draw a horizontal or vertical line from the shape of the frame. The nice thing about the vector objects is that they don't lose definition when sized and will always take full advantage of the resolution of your printer.

As you've probably already noticed, Easy Text Pro uses a separate program for output; it's automatically called by clicking the Print menu option. This approach has the advantage of making a lot more memory available when printing documents, although obviously you must save your work before you call the output program.

Now that you have a working knowledge of Easy Text Professional, perhaps you'd like to attempt a fullyfledged design with the help of our tutorial just over the page...

A wide selection of vector objects are available and all make the most of your printer's resolution.



asy Text Professional opens up a world of design possibilities, but without any practical experience it can be very difficult to even consider putting a whole page together. Flattening this learning curve is the aim of this page; it will explain exactly how the demo document on this month's cover disk was created.

Hopefully, a run through these techniques will provide you with enough confidence to go on and produce some classy publications of your own. Let the show commence!

HEADS OR TAILS?

The first step in producing the page is to get the headline on screen. As you can probably see, this is made up of a black vector box and a 48-point Dutch banner with a "white" style applied. The simple rule when it comes to adding any effect to text – bold, italic and so on – is to highlight and then apply. In other words, drag the edit pointer across the text and then choose the effect you want to use.

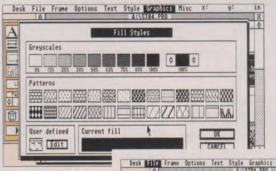
The contents bar is next on the list of priorities. This too is built from a number of vector objects and rather than draw each individually, it's a good idea to create the first and then use Copy Frame to make the duplicates needed. It's a bit difficult to get the spacing even when working in the document window, so use the Page Preview panel whenever you can. The entries for the contents were also typed in by hand and the font left as 10-point Swiss.

When you first begin to work with the program, it's very easy to forget to switch to edit mode and find unwanted frames drawn on the page! These can be removed with a swift click on the **dustbin** icon (oh, alright then "trashcan") on the left-hand side of the screen.

It's helpful to change the column set-up at this point and you can do that through the Column guides menu entry - four is the ideal number in this case. You'll notice that a couple of other helpful features are tucked away here too. The guides can be switched off to provide a more realistic view of the page and Snap to guides makes each frame automatically jump into the correct position when moved within a reasonable range. By using these features, it's easy to get an accurately-spaced publication without trying too hard.

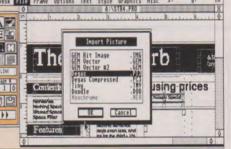
PAGE BOY

Broaden your design horizons the "Easy" way! Nial Grimes dons the carnation and takes a practical look at Easy Text Professional...



The tint that vector objects use is easily changed through this dialogue box.

Text and graphics are imported in a very similar way – just select the format you want to use.



GO WITH THE FLOW

The text for the main news story needs to be imported as a 1st Word Plus file (it's called WORDS.DOC in the EZTP.TUT folder on the cover disk). But before you actually get any text into the document, the frames must be linked. To do that, select the first frame in the chain and then click the Link icon. Now select the next frame, click Link again and repeat as many times as necessary. When you actually import a document into the first frame, it will flow smoothly through all of the remaining parts of the chain.

The final step is to add the picture at the right of the document. This is also on the cover disk as *HOUSE1.PI3*, a Degas image, and is added in exactly the same way as text: create a graphics box and then choose Import from the File menu.

The only other remaining part of

the layout is the caption on the far side of the page, which you will notice is flushed to the right. Text formatting such as this is best handled through paragraph styles, a topic a little bit beyond the scope of this introductory article. Don't worry though – it's just one of the subjects we will be examining in next month's exciting instalment. Miss it at your perill

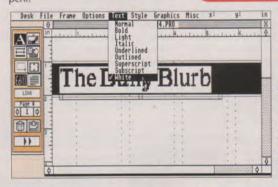
GENERAL DISK PROBLEMS

In the unlikely event that your cover disk won't load or gives you any other problems, disconnect any peripherals, switch your computer off for at least 20 seconds and try again. If this doesn't solve the problem, return your disk, with a stamped addressed envelope, to:

P.C Wise Ltd, Dowlais Top Business Park, Dowlais, Merthyr Tydfil, Mid Glamorgan CF48 2YY.

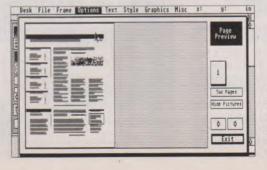
PC Wise will test your disk and send a replacement as quickly as possible. You can contact the PC Wise Helpline with any urgent problems concerning faulty disks on 0685 350505 between 10.30 am and 12.30pm, weekdays.

Should you require technical help, call the ST Review Helpline on Friday afternoon between 1pm and 4pm on 0625 859766.



Different effects can be applied to text through the above menu—"White" is used extensively throughout the demo page.





The page preview may look primitive, but it provides a good overall idea of the design.

Column guides are handy for keeping text and other page elements properly aligned.

UNLOCK EASY TEXT PROFESSIONAL

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ST Review has put together the following mouth-watering offers with zzSoft and Compo Software until January 31, 1995...

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135-page manual including instructions for Easy Text Professional and Easy Text Professional Vector.

● EASY TEXT PROFESSIONAL VECTOR – £10.00

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FOR EASY TEXT PROFESSIONAL

Having problems with our *Easy Text Professional* cover disk program? Then call **01254 386192** on Wednesday afternoons between 2pm and 5pm. Alternatively, write to zzSoft, **114 Sparth Road**, Clayton Le Moors, Lancs **BB5 5QD** enclosing a stamped-addressed envelope for reply.

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For update pricing, please phone.

NVDI v2.5 will continue to sell for only £29.95

MagiC



"If you want a multitasking system that works simply and realiably, then MagiC is for you."

ST Review, June 1994.

MagiC is a full TOS replacement; a very fast disk filing system; has accelerated serial, midi and printing routines; and is, of course, a true preemptive multitasking system. MagiC Desk, a replacement Desktop and a powerful command shell are included. MagiC runs on all ST, Mega and TT computers with 512Kb, but 2Mb is recommended for a useful working system.

The Falcon version is expected later this year.

'It's like running an accelerator and getting the multitasking thrown in for free."

ST User, February 1994

MagiC (RRP £69.95)	Intro Price	£59.95
MagiC and Ease		£99.95
MagiC and Kobold		£99.95
MagiC, Ease and Kobold		£139.95

NB: Excellent with Calamus SL. Compatible with Notator Logic but not with Notator SL and not yet compatible with Cubase

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The PAK68/3 turns your computer into a 32bit system using the 68030 processor. A 32MHz clock, 32bit wide TOS and a 32kbytes cache will accelerate your system by 775% (Gembench 3.10). This is faster than the Falcon and the TT! Clock speeds of 40 and 50Mhz are possible. The use of recycled processors makes this upgrade very affordable without sacrificing reliability.

A 32bit FastRam board and a colour graphic card adaptor are under development.

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This high Speed File Manager gives unbelieveable speed. Copies 1000 files (10Mb) in 45sec (GEMDOS 5:35min!). Use Kobold for backing up; formatting floppies (DD,HD,ED); move, copy and delete files; use the learn function to automate repetitive jobs. Ease calls Kobold automatically for all desktop file and floppy operations. Run as ACC or PRG Kobold 2.5 (RRP £59.95) Intro Price £49.95

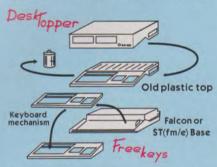
Ease



Use your Atari with EASE. Replace the old Atari Desktop. This program could not be more appropriately named. Right click replaces the double click. Iconize windows for instant access to groups of files. Ease is aware of multitasking and comes with a sophisticated Colour Icon Editor. Works on any ST, all TOS versions, any display and graphic card.

DeskTopper

No space for accelerators, TOS boards, hard disks, graphic cards and PC emulators? Convert your Atari into a desktop computer with more space. Simply replace your plastic top with the DeskTopper and fit your keyboard into FreeKeys (or replace with a PC Keyboard using AT-Key). For more information - ask for a DeskTopper leaflet.



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Essential Buy of 92% - ST Review Christmas '93 Gold Award of 93% - ST Format Feb. '94

Quiet fan Internal Power Supply 100-240V 2 Year Warranty Small (2.5x6x8.5") (WxHxD) Dual SCSI Port Device Number Switch

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		£209.00	
170Mb	Quantum	£259.00	£299.00
270Mb	Quantum	£299.00	£339.00
340Mb	Quantum	£329.00	£369.00
540Mb	Quantum	£399.00	
			£739.00
1Gb AV	Micropolis	£799.00	£839.00
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Service

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Multi-session Drive Photo CD compatible
Double Speed No caddies Plays Music CDs
Dual SCSI port Headphone socket with
Volume control Stereo Phono connectors

Totalia control of ottal control contr	
ExtenDOS v1.2x (CD-Rom Driver)	£29.95
ExtenDOS Pro v2 with music CD player	£39.95
NEW - Atari Mega Archive, Volume 1, Sep	pt 94
1.9 Gigabytes of Compressed Data (UK)	
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Bernd Lohrum Vol 2 (German)	£24.95
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THE CHANGING

orphing is one of those image processing effects that everyone wants to try out. For the uninitiated, morphing is a computer technique that transforms one image into another in a number of stages. It started off in Hollywood special effects studios and resulted in the phenomenal success of the futuristic techno-thriller. Terminator 2, which contains several memorable morphing scenes. Over the last few years it has undoubtedly been over-used, particularly in adverts, but this year's box office hit, The Mask, has put it firmly back in the public eye.

If you've ever felt like trying your hand at the game, turning Aunt Ethel into a elephant, for instance, or your moth-eaten Ford into a Ferrari, Lexicor has launched just the program you need. *Metamorphosis* 24, known more affectionately as



The final 24-bit images are extremely good quality as these start...



... mid-morph...



... and end pictures show.

KEY FACTS

Product:
Metamorphosis 24
Company:
16/32 Systems
Contact:
0634 710788
Price:
£59
SYSTEM
Minimum Memory:
1Mb
Resolution:
640 by 400 or greater

Morpher, is a complete morphing package for the entire Atari range that will go down extremely well with those who enjoy playing with and manipulating colour images, as well as serious artists looking for some highly original special

Morpher is, not surprisingly, a 2-D rather than a 3-D morphing program so you certainly won't be using it to audition for the part of special effects producer on *Terminator 3*! However it is surprising just what you can achieve with a little imagination – and lots of patience.

WHAT YOU GET

Morpher runs on any Atari with 1Mb or more of memory, from STs and STes up to the TT and Falcon. Even a hard drive is optional but owing to the number of images needing to be generated to get smooth morphing transitions, it is highly desirable. Morpher will run in any standard resolution with at least 640 by 400 pixels apart from the Falcon's true

colour mode; if you own an ST, this limits you to High resolution. A maths co-processor is highly recommended by Lexicor for machines such as the TT or Falcon as it is claimed to speed up morphing considerably and cuts down the amount of time you're likely to spend gazing impatiently at the screen.

The program is supplied on a single disk with an adequate 23-page A5 manual, somewhat loosely translated from the original German. Although it contains a tutorial that uses two supplied images, it is a little on the light side and makes no attempt to encourage experimentation. Installation and loading is very straightforward and the program will even run straight from the master disk or a back-up copy.

Morpher is an intuitively designed, GEM-based program with a point and click interface, including permanent floating toolbar and activity monitor window. The source image is loaded into one window and the destination image into another. Only the TIFF format is supported so you

may have to do some conversion, depending on the image source, but greyscale and paletted versions are supported too. Naturally 24-bit colour images work best (even on an ST as the program works internally in 24-bit colour) but 256-colour ones are slightly faster to morph. The only real restriction is that both source and destination images must be the same size in pixels.

Morphing is achieved by placing control points on the source image, adjusting them on the destination image, adding lines between the points (the morphing joints) and then pressing the "go" button. This apparently simple process conceals a lot of hard work but as most of it is done by your computer, there's little to worry about except what to do in the meantime.

GETTING RESULTS

So what can you achieve with Morpher? You can carry out single morphs relatively quickly, specifying a percentage of the source or

STEP BY STEP GUIDE

IN CONTROL

Any ST/TT/Falcon

The idea behind morphing is that you link important parts of the two images together using the control points and morphing joints that guide the program to achieve the effect you want. Although you wouldn't normally morph such simple images, the following example serves to illustrate how to go about the job...



The first control points are placed around the outline of the apple using the hammer (insert points) tool. Note that each one has a corresponding control point in the destination window.



The control points in the destination window can now be moved around the outline of the carrot using the arrow tool (move points), keeping a careful eye on the original.



Next the line tool is used to join up the control points to form morphing joints.

At this point it's a good idea to save them (as a *.MST file), just in case everything goes wrong!

FACE...

Andrew Wright has fun with Metamorphosis 24, a brand new ST-compatible morphing program!

destination image, which is useful for one-off special effects or trying out your work first before you commit your machine to a night of frenzied processing and create a full animation. The animations are the best feature and you can specify the number of frames in between; the more you go for, the smoother the animation will be.

The program stores each morph frame as a separate TIFF file (with or without compression) and it automatically numbers them so that they can be replayed using the supplied player or imported sequentially into a program like DA's Vector Pro (after conversion to its TIC format, of course). The only fly in the ointment is that the player program is still in German but it isn't hard to get to grips with.

As in so many other things, you can only get out of *Morpher* what you put in. And much like rendering or raytracing, the main thing you put in is time. The length of time it takes Metamorphosis to carry out even the simplest morph is probably the single biggest limitation of the program.

Four quality options are offered, from low quality through standard, good and best. A pair of small (200 by 100 pixel) images morphed once for test purposes on the lowest quality setting can take between three and five minutes depending on your machine. At the highest quality, the same morph can take several hours, even on a Falcon. A ten image animation might well take you all night or longer.

Images can be dithered on-screen. There are three settings but only one,



Select the morphing quality based on how long you want to take. You can do a single, quick (well, quickish) preview image or opt for a complete animation of a dozen or more frames...

WHO'S AFRAID OF THE...

For some reason, which I really can't fathom out, my wife does seem to go out a lot at night. Owoooooh...



Going ...



... going ...



... totally gone!

the Floyd-Steinberg method, offers anything like the quality you'd expect in 256-colour mode though in black and white on an STe, it was certainly acceptable. Oddly enough, installing Atari's XCONTROL improves the quality of the screen dither.

VERDICT

In terms of features, *Morpher* is well endowed but only up to a point. On a Falcon or under *MultiTOS* you can specify a 3-D interface, though that hardly counts as vital.

The three main morphing parameters can be altered using slide bars, which is an unusual feature not found even on professional-quality programs on other platforms, but the manual recommends against it – and the speed of the program hardly encourages lengthy experimentation.

One common sense feature is the ability to change the colours of the morphing control points and lines in case you are using an image that is predominantly the same colour.

Regrettably there is no way of zooming in on the image for accurate control point positioning, a major omission that will annoy many serious users. In fact, if you find yourself having to morph small, complex images you might have to resort to scaling them up beforehand, but this has a proportional effect on the time taken to carry out the morphing operation.

If you need to get into morphing, Metamorphosis 24 is worth trying out, though it really needs an accelerated system to make it more practical. The results are worth the wait though and at the end of the day, that's what really counts.

SUMMARY

GOOD POINTS:

Works on most machines
Friendly interface
Produces superb 24-bit colour results

THE PARK STATE OF THE PARK STA

BAD POINTS: Takes forever and a day to

get the results!

No zoom mode

Sketchy manual

FINAL WORD

"Metamorphosis 24 adds yet another string to the ST artist's creative bow – but just don't expect the arrow to travel very fast!"

PERFORMANCE OUERALL EASE OF USE DOCUMENTATION EFFECTIVENESS VALUE FOR MONEY

News from the German market...

TOP MARK

t's the start of October and Winter's fast approaching – it's sub-zero at night and snowing. It's a good time for people here in Germany to take care of their Atari!

Let's first have a short look at developments on the topics from last month. The Eagle (no, not Eddy – the Atari TT clone) will be shipped with a free upgrade kit to a 68040 processor as soon as the changes to TOS have been made. By the way, Eddy is a famous person here in Germany and has had a lot of TV show appearances...

The Atari Linux (the Unix-compatible freeware system) has made good progress. It already supports the X11 graphic window system so you no longer need to buy a PC to run Linux.

A new, powerful and yet easy to use graphic animation and 3-D modelling program has been announced by Team Computer. The working title is RIP (which stands for "Render in Perfection") but this is likely to change in the next days. I have seen movies done with this - most impressive. Similar effects to those in Terminator 2 or Lawn Mower Man can be created easily. The main difference between this and other programs is that the editor that defines everything is extremely easy to handle. lobs that involve calculations can be split among more than one computer to speed everything up. Also, the software is available for other platforms such as the Silicon Graphics Workstations, Linux, OS/2 and so on.

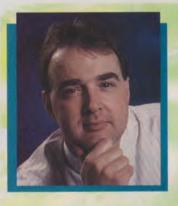
I recently had the chance to take a close look at the Janus card as reviewed in this issue. It was installed in an Intel 486-DX2/66MHz machine with a VGA graphics adaptor, running in 256 colours. Although the technical data states that Janus is "only" a 68000 processor running at 16MHz, a lot of the file functions, graphics, keyboard and the like run on the 486. So Janus appears to be much faster in 256 colours than my TT here in monochrome! Doing a few "compatibility checks" with specially-written programs like Signum!, Warp9, NVDI or Tempus show that even these programs can be run in a special "local" (compatibility) mode on Janus which is a little slower. Warp9 and NVDI are obsolete in the



"Dual" mode as the graphics are so fast – after all, two processors are better than one! Janus uses its own onboard memory; two SIMM slots allow for up to 32Mb. VHF-Computer is working on OS/2 support and are checking a 68030 version.

Atari software on other computers – MagiC World Pro was announced for Apple machines at the Apple Show in Frankfurt last weekend (see news in this issue). Although not yet finished, it looks like it may offer a portable computer for your Atari programs!

Manfred Bäcker is 27 and works in a Cologne computer shop. He's been progamming since 1985 and is active on various bulletin boards in Germany.



Andrew Wright is a freelance writer for various magazines and has been with ST Review since its inception. He is ever ready to pontificate on the most unlikely of subjects...

WRIGHT ISSUES

f there's one thing I find hard about reviewing software it's the question of value for money. The present government has been obsessed with it for years but as the constant barrage of popular and media criticism shows, it's a concept that nobody can clearly define.

It is such a personal thing that I sometimes wonder whether we ought to include it in our reviews at all. Take the excellent word processor, Papyrus. I doubt whether more than one in twenty ST owners would aspire to it, largely because of the outlay, but that still makes it worth developing this kind of software because that five per cent represents several thousand prospective buyers. On the other hand, it does beg certain questions about value for money. If 19 out of 20 of you see a piece of software as being out of reach, how can we justify giving good value for money

scores? If all you do is write the odd plea to your bank manager or mail merge a few thank you letters at Christmas (shame on you) then that hundred and odd pounds is hard to justify. Particularly when the washing machine is on its last legs and the car leaves bits of exhaust pipe at each major junction! If you're running a business, though, and want to present a polished, professional image, or you're a journalist with deadlines to meet, money might well take a back seat. In fact, a word processor that did everything I wanted, the way I wanted, would be worth several hundred pounds to me. It hasn't appeared, but I'm living in hope.

I can't speak for the other reviewers (opinionated as I am) but I can explain how I decide my marks. It's all about product positioning. It might be a phrase adored by marketing types up and down the country but it does make sense.

Value for money...

For example, if you all had a vote, I'm certain a DTP system based on the forthcoming DA's Layout TC, which will cost several hundred pounds, would limp home with a score of around one. Compare it with Calamus SL though, and it deserves at least an average rating. Take the extra, industry-standard PostScript features and its speed and flexibility, and it goes higher still - especially when seen from the point of view of the one person who counts, namely the person who is likely or almost certain to buy it.

That really is the crux of the matter – if you're not interested in a product or you can't afford it then the value for money score is irrelevant. It's only when you need what it offers and can afford to buy that the value for money angle begins to make sense.

Product:
170Mb Hard Drive
Company:
Gasteiner
Contact:
081-345 6000
Price:
£295 (complete)

SYSTEM
Minimum Memory:
0.5Mb
Resolution:
Any
Computer:
Any ST/STe

asteiner has recently revamped its range of hard drives by adding an external host adaptor, a brand-new mini-case design and a choice of a dozen or so configurations. The range starts with a 120Mb model for well under £300 and goes all the way up to a massive 1.8Gb at £1,345. The only important difference between them is likely to be the speed of accessing data. In general, the larger the hard drive, the faster it is.

The new Gasteiner drives certainly look the part. The auto-booting, self-parking drive mechanism is encased in a medium grey case 210mm long by 90mm wide and 140mm high. Though designed to stand upright with the smallest possible footprint, it can easily be kept on its side and while the case is certainly strong enough to support a monitor, it would have to be somewhat precariously balanced.

On the front of the smart looking case is a green light and a flush fitting on/off button although no drive activity light. At the back of the unit are the twin SCSI ports, allowing you to daisy chain additional drives and other devices. The power lead plugs into the rear and there is also a simple SCSI ID selector switch. The

Andrew Wright tries out a cheap and cheerful hard drive from Gasteiner...

drive is connected to an ST via Gasteiner's Top Link which acts as an external host adaptor in the same way as The Link or Translator. The construction is rather flimsy and while most ST owners will probably fit and forget it, it could come adrift from the Centronics connector under heavy use.

PERFORMANCE

That completes our guided tour of the unit itself but how well does it work? Hard disk drives need special driver software to tell the ST that the drive is attached and how to access the data and programs stored on it. Gasteiner provides a set of software utilities called SDSystem which consists of driver and management software for setting up the drive. Although the drive is supplied ready formatted and partitioned, most of you will want to set up your own partitions to suit yourselves.

This is made a little easier by the inclusion of a dedicated Gasteiner

hard dick manual The

Smart
appearance
- the
Gasteiner
unit has
good looks
but could
do with a
drive
activity
light.

hard disk manual. The 46-page A5 book includes chapters on building your own drive, adding a second bare drive into the case, setting up the drive and troubleshooting. Some aspects are rather dated – it talks about the "new" 44Mb removable drives and small hard drives costing £5 to £10 a megabyte which shows its age somewhat. It also tends to skim over important subjects like setting up the drive caching, but it is still a good, simple guide for the first-time hard drive owner.

The SDSystem software is fully featured and includes a number of facilities that are accessible from the main shell program, SDManage. This provides detailed information on any SCSI drive installed, formats and partitions the drive with big GEM partitions up to 256Mb in size, adds an auto-booting hard disk driver and generally does everything necessary to get you up and running. You can password protect the drive or just some partitions, look for bad sectors, zero partitions, check the drive carefully by reading and writing to each sector and save partition information and FATs/root directories for emergency use.

The driver can be fully configured

Neat 'n' sweet - the rear has two SCSI sockets, the SCSI ID selector and power lead socket.

by altering three different buffers or caches, one for GEMDOS, another for FATs and a third for the data itself

The main problem is the poor English translation in the dialogue boxes and help screens. Trying to reformat the drive proved less easy than it should have been as the software crashed twice and then produced a puzzling, undocumented error message about the bad sector list being in the wrong place! The installation program tried to save partition information to the master floppy which didn't have sufficient space – it's little things like this that can cause big problems if you're not used to them.

VERDICT

There is little wrong with the build quality of the drive case, and the performance under the *SDSystem* driver is very good. The lack of drive activity light can cause confusion, especially when formatting and partitioning, and the fan is a little noisy though not actually disturbing. All in all, a decent drive let down a little by software that really should be easier to use.



The SDManage program allows you to format the hard disk.



PERFORMANCE DUERALL

EASE OF USE

DOCUMENTATION

EFFECTIVENESS

VALUE FOR MONEY



as a theme nowadays and this trend is set to continue. While it's true that there has always been an element of aggression in games, today's offerings have an added ingredient – realism. Despite this fact, very few titles have any form of warning on the box and there are no age restrictions on buying

ore and more video

games feature violence

The situation has been partly self-regulating up until now - most kids simply aren't using the £1,000 PCs required to play the latest generation of 3-D games. This is about to change though, as a new wave of ultra-powerful consoles - Jaguar included - hit the market. For a couple of hundred quid you or your children can have a machine with as much raw graphical processing power as around fifty STs! More than enough brawn to put across vivid

IN PUBLIC violence...

wrenching 24-bit colour. The whole situation is just a time-bomb waiting to explode. It's all leading up to the day when the tabloid press notice that "young minds are being corrupted by an evil influence" and go on a moral crusade in the name of a few extra sales. After all, you know what they say: "hell hath no fury like a vested interest masquerading as a moral principle". The fact that parents usually control the purse strings (so can vet what their children play)

is unlikely to make any

difference whatsoever.

arcade games in gut-

It's quite possible that strict regulation will follow and software publishers will be left wondering what on earth has hit them. Let's face it – it is now time something was done to at least warn people about the level of violence in a game. If publishers claim that their violent titles are

not aimed at children, why don't they put cautions on the box? Surely even a noncompulsory caution is enough to stave off most criticisms and it would also force authors to think more carefully about the game style and the target market.

Crime and

ELSPA almost succeeded in putting together a scheme of this sort, but one or two major players didn't want to get involved and it now looks as if we're back at square one. Surely I can't be alone in thinking that the inevitable is simply being delayed.

Of course there is no way to stop kids playing ultra-gory games if publishers insist on producing them. However, the industry can veer away from disaster by taking a more responsible attitude to what is, after all, a very youth-oriented medium. The message is sounding loud and clear – regulate or be regulated...

Nial Grimes is a freelance journalist and has played all manner of video games over the years without any ill effects to his mild character. He welcomes constructive criticism of his opinion column – but a disagreement on his part will lead to a knuckle sandwich...

To PC or not to PC...

eing one of the founders of Club Cubase UK and manning the ST Review helpline, I get a chance to speak to many computer users every day. Along with my Internet and CIX access, I exchange information and opinions with computer owners from every corner of the globe (since when do round objects have corners? Ed).

The ST was not as great a success as Atari originally hoped, but it was successful enough to establish itself as the number one computer for MIDI and other music-related tasks. There is hardly a recording studio in the UK without an ST running either Cubase, Notator or some customdesigned studio automation system. Surprisingly, in these recording studios where every piece of equipment costs the earth, most STs are run with 1Mb or 2Mb of RAM and mostly without a hard disk.

TECH TALK

With no NVDI or other accelerator in sight, MIDI musicians have been quite content with such a set-up.

No wonder musicians are impressed when a shrewd salesman shows them the latest 486based PC, suped up with every imaginable hardware add-on. An equally enthusiastic demonstration of a Falcon is hard to find these days. It seems that the whole music industry is an anti-Atari zone for reasons best known to them. The music magazines have been very keen to attack the Falcon left, right and centre. Cubase Audio for the Falcon didn't even get a proper review in the leading MIDI magazines! Instead, the magazines are full of PC-based reviews and articles. Never mind the readers - we just love our 486s...

Most music shops are only too eager to sell you a PC or Macbased hard disk recording system that costs several times more than a Falcon-based one. If you dare ask about a Falcon you'll be forgiven for thinking that you have just cracked a funny joke. The general attitude in both shops and magazines is that the Falcon is a toy and no more. It seems that the fact that most music we hear on the radio and TV was produced using an ST is unimportant. Atari users are just poor lost souls that must be saved and converted to a PC as soon as possible.

This brings up the question: why? What has caused this shift in attitude? Maybe profit margins play a part. Maybe its Atari's relationship with the retailers and music magazines that has soured. Whichever it is, it seems to me that the magazines are doing their readers a great disservice. They seem to ignore the fact that the majority of users have an ST and many would have bought a Falcon if not so systematically



discouraged. I should think that both music shops and music magazine editors need to take a closer look at the market and come up with a simple answer to the following question: what is the best hard disk recording and MIDI sequencing package for under £2,000? I think the word "Falcon" will have to be included in the answer...

When Ofir Gal is not late submitting his articles, he is usually late for a recording session. His latest project with the UK-based band KRY is their debut album Miles Away which is to be released later this year.

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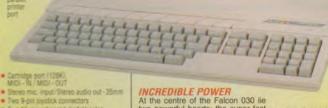
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NSTEREO

Move over Magic Eye - the ST is here. Andrew Wright goes cross-eyed over a new stereogram design program...

STEP BY STEP GUI

STEREO DEMO

Fire up the demo of Stereo CAD (save disabled) and step into a weird 3-D world behind your computer screen. In this brief tutorial we'll create an early Christmas scene. One tip before you start - click on "Pg 1" in the bottom right window and take a tour round the four menu pages.

First of all, define a shape. Click in the Shapes window under the word "Undefined" hold down the mouse button and move the mouse slowly up or down to cycle through the available shapes. Stop at "Star".

In the same way, change the box underneath the word "Star" for the number of points. Five will do nicely. Alter the radius to 50 or 60 and layers to 8, 9 or 10 in the same way. Click on the word "Undefined" and when the box appears, press <Esc> to clear it. Type in the name of your first object and follow our quide, starting with assigning the shape to an object ...



In the Objects window, click on the shape number and alter it to "1". The name changes to "tree" as you've matched shape 1 with object 1.



Add more stars, altering the size in the percentage box. Click on the "create stereogram" icon in the Options window, wait a few seconds, press the icon again...



Place it near the centre and left-click once. Return to the Objects window and select object 2, again assigning it shape 1. Right-click again and place it on the screen.



Click on the Orthographic projection window for a

quick rendering. Right-click and

you'll see a black screen with

... and you'll see an aerial view of several Xmas trees. Be patient - it may take 5 minutes of gazing before you perceive the 3-D effect. Use a paint program to check out TREES.PI1 on the cover disk...

hanks to the Magic Eye series riding high in the book charts at the moment - stereograms are the "in" thing. In case you haven't come across them, they're two dimensional optical illusions, usually in colour, that can fool the human eye into seeing a third dimension by using clever patterning techniques. Now you can create your own stereograms using a budget program that will run on any Atari, including the Falcon.

WHAT YOU GET

Stereo CAD comes on a single disk with a 21-page A5 manual that contains tutorials and information on most aspects of the program. It runs on any Atari, including 520s, but only runs in ST low resolution.

Stereo CAD scenes are built up using 15 layers but what you see depends on the depth of the objects you specify and on which layers they start and finish. The scenes are composed of a number of objects, each of which is a pre-defined shape, such as a sphere, pyramid or star. They can be given a 3-D appearance by making them smaller or larger on successive lavers.

There are seven shape types to choose from: spherical polyhedron, conical polyhedron, tube, prism, star, text and freehand plate. The spherical polyhedron is used for round objects and a sphere is a 72-sided polyhedron, as far as Stereo CAD is concerned. Each of the main shape types can be altered - the star, for example, can have anything from 3 to 64 points. The text is applied in a thin sans serif font but while it can be almost any size at all, more than five characters in a line makes for difficult reading. It isn't three dimensional as it takes up only one layer but successive layers can be created to give a three dimensional appearance.

Shapes have several attributes, most of which can be altered, depending on the shape. These attributes include the number of points or sides (usually up to 72) the radius, height and width (x height and y height), the number of layers and direction it faces. The latter means you can have it inside out (like a hole) with a user-defined wall thickness. Many attributes are interrelated, such as the radius of a sphere which obviously affects the number of layers it appears on.

Once an object has been created,

STEP BY STEP GUIDE

SCRIBBLE PAD

The scribble pad is the ideal starting place for creating three dimensional stereograms. In the lower right-



hand box, click on the page number until you see the scribble icon and then click on it.



Use any of the 16 colours to draw with – each represents a layer within the stereogram. Use the colours on the left for the back of the stereogram or a colour on the right for the front, building up objects layer by layer.



Let's create an irregular cone leaning slightly to the right. The black area is the back layer, the blue the next and so on until the tiny blue dot is 11 layers from the back. Then click on the "create stereogram" icon.



After a couple of messages have passed, click on the "view stereogram" icon and all will be revealed – if you can't see the leaning cone here in all its 3-D glory then you'll just have to take our word for it!



it can be placed on the scene by clicking the right mouse button to display the scene background and then placing the object with the mouse.

ST/STe/Falcon

If you create a useful set of shapes or objects they can be saved for future use. Freehand plates let you draw objects in freehand mode and build up irregular objects layer by layer. As soon as you have an object in position you can render the stereogram on-screen and check to see what your object looks like. You can also specify whether you want a stereogram in front of the screen or behind it. Most stereograms are created behind the scene but those in front can almost appear to be coming out of the screen towards you, although they are harder to see. The stereogram is rendered using a default finish (in reality, a Degas .PI1 file) which is a regularly-spaced pattern that helps to create the 3-D effect.

There is a scribble pad for quick stereogram creation and the principle here is that you paint a picture using 15 different colours, each one corresponding to a layer (see the *Scribble Pad* box).

It is also possible to import Degas .PI1 images and place them as scene backgrounds but this can be pretty hit and miss unless you choose the right colours.

VERDICT

Without a doubt, Stereo CAD has the world's worst interface – it is completely unintuitive and guaranteed to irritate you at least once a second!

Apart from that, the only other problem is the poor choice of colours. Dark blue text on bright blue makes the field labels very hard to

On the other hand, the stereogram results, while necessarily limited due to the low resolution, are startlingly good and with practice you can see your 3-D creations within seconds.

You can save the stereograms as .PI1 files or print them using something like *Imagecopy* and they're just as much fun. Who knows, perhaps some will end up in *Magic Eye 3...*

SUMMARY GOOD POINTS:

Great fun! Creates good stereograms

Well priced

BAD POINTS:

Absolutely dreadful interface
Poor choice of colours

FINAL WORK

"After using Stereo CAD you'll wonder whether there is anything our trusty STs can't do!"

OVERALL

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UNDO DONE

The finish, the pattern that makes up the image, can be altered using the basic editing screen.

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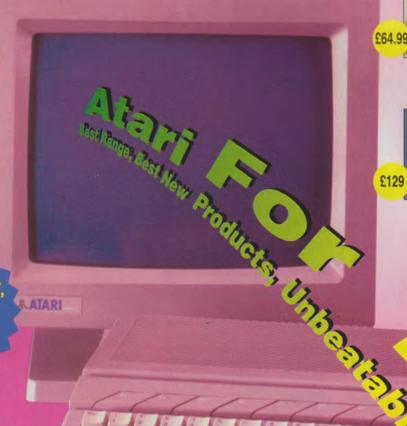


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SYSTEM

The minimum suggested machine specification is a PC 386SX with 1Mb RAM, VGA graphics card, one free ISA slot, Microsoft compatible mouse and MS-DOS V4.0.

tari enthusiasts are still turning into ex-Atari users as the cost of PC and Mac hardware continues to fall, so perhaps emulation has a significant role to play in the future of the Atari platform. Unfortunately, emulation traditionally means second class performance but Janus offers features far superior to the spec. of an original ST – so does it provide a third choice if you want to continue using your existing Atari software? Let's find out...

WHAT IS JANUS?

The Janus system is a hardware plugin card for the PC with an on-board 16MHz Motorola 68000 processor

Janus - essentially the brains of an ST on a PC card.



IT'S AN ATARI

Is the Janus Atari emulator a viable alternative to the Falcon? Joe Connor sees how it measures up...



Bearing in mind that PC systems use a wide range of components, here's some comparative info on the Janus and *GEMulator* with our test system of a PC 486DX 66MHz, 17" SVGA monitor, DOS v6.2, Windows v3.1, 8Mb RAM,

ISA Spea Mirage V7 graphics card, Panasonic IDE CD-ROM, IDE hard drive, Sound Galaxy NX Pro 16 CD-ROM interface and sound card.

Video

- ST high resolution: both.
- ST medium and low resolutions: GEMulator.
- 16-colour resolutions up to 800 by 600 pixels: both, although Janus is much faster.
- Mono resolutions up to 800 by 600pixels: GEMulator.
- 16-colour resolutions up to 1280 by 800: Janus.
- 256-colour modes: neither.

Memory

- · GEMulator uses existing PC memory.
- Janus can access more than 8Mb of on-board RAM.

Disk

- Floppy disk formatting: neither.
- Floppy read/write: both but Janus much more reliable.
- Floppy handling of non standard formats: GEMulator.
- Floppy copy A to B with single drive: GEMulator.
- Hard disk virtual partitions: GEMulator.
- Hard disk partition remapping: GEMulator.
- · Hard disk partitions larger than 32Mb: Janus.
- CD-ROM (IDE/SCSI) access: Janus.

Ports

- Serial port: both, GEMulator more compatible.
- Parallel port: both, GEMulator more compatible.
- MIDI: neither but under development for Janus.
- Cartridge: neither but under development for Janus.
- Network (Ethernet) access: Janus.

and TOS 2.06 ROMs, making its nearest relative the Atari MegaSTe which uses the same combination.

Janus requires its own on-board memory in the form of a matching pair of fast SIMMs which are plugged into the sockets provided. Adding 2Mb or less won't get you far with modern Atari applications so the 8Mb (two 4Mb SIMMs) supplied with the review card is probably the optimum configuration.

Installing the Janus card into the PC is a straight-forward "plug and play" operation into any free internal PC expansion slot. After copying the driver file onto the boot partition of the hard drive, Janus is ready to run. For those who can't bear to type more than a few characters, a batch file for each resolution has thoughtfully been included. If you're a newcomer to the PC platform and are not comfortable editing your CONFIG.SYS, sorting out IRQ conflicts and managing port addresses, get some help! The draft manual covers the possible problems but doesn't offer the kind of help new PC owners are likely to need. Janus uses the PC keyboard, mouse, monitor, floppy

SUMMARY

GOOD POINTS: Speed of graphics is remarkable Simple to set up

Direct CD-ROM access

BAD POINTS: Very expensive Lacks raw power

Separate memory needed

"A remarkable product offering an alternative to upgrading an ST or purchasing a Falcon."

drives, hard drives and ports as if they were real Atari components, the only obvious difference being the keyboard layout for which sensible alternatives to the Atari-specific keys have been assigned.

Atari emulation can be launched from the DOS prompt or from Windows. Janus even runs happily as a full-screen DOS session enabling background tasks in Windows to continue while working in Atari mode.



Just try getting an 800 by 600 pixel desktop in 16 colours out of your ST!

WHAT IS THE GEMULATOR?

The GEMulator takes a different approach from Janus and achieves its Atari emulation in software. This means that its performance is directly related to the speed of the host PC. As a rough guide, a fast 386 PC gives ST-level performance while MegaSTe performance and beyond is possible only when fitted inside a fast 486 or Pentium-based PC.

A hardware "ROM reader" card equipped with eight empty ROM sockets is used to provide access to TOS and (just like Janus) this plugs into any free PC expansion slot. It's possible to mix and match ROM sets and all TOS versions up to TOS 2.06 UK along with the Magic Sac and Deskcart ROMs are supported. The GEMulator uses the PC's internal RAM which makes a working set-up considerably cheaper than the Janus card.

The GEMulator supports all three ST resolutions along with four additional ones offering up to 800 by 600 pixels in colour or monochrome.

Software installation is straightforward and an INI(tialisation) file is used to set up a range of emulation options. Using an ASCII text editor, it's easy to set up custom INI files for different tasks and choose between them when running GEMulator.

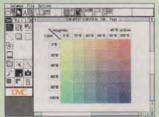
In addition to normal hard disk partitions, GEMulator offers "virtual

partitions" which are seen by DOS as single files but by TOS as real 32Mb partitions. Each partition only occupies the space needed to store the files and it's a neat way to keep Atari and PC files apart. Unfortunately there are no custom tools to repair damage to virtual partitions and files can't be shared with PC applications so limiting their usefulness.



Calamus S works fine in GEMulator while Janus needs a patch.

GEMulator options can be selected from this DOS menu before running.







Janus can be launched as a full-screen DOS session from Windows.

the "Show/Print/Cancel" dialogue box worked fine and the LaserJet sprung into action from the "Other" option in the Calamus print box. That's Write 3 also printed via its "Printer (Direct)" option.

An Auto folder program supplied to enable Calamus S to work in the "dual" modes didn't work although Calamus S works fine under GEMulator in all resolutions. Unfortunately for us, neither CGS Computerbild, the UK distributor, nor the German manufacturers could be contacted regarding these problems.

One of the attractions of buying another machine is the masses of software available on CD.

Adding a CD-ROM to an Atari is still relatively expensive and there are only a few Atari-specific CDs around. However, Janus happily accessed a cheap IDE-format Panasonic CD-ROM drive; most of the software on the Compo Power CD collection ran directly from the CD.

VERDICT

Most of us are looking for ever-faster graphics and processing power; Janus and the GEMulator offer a choice between one or the other but not both! The Janus "dual" mode 16-colour resolutions are a delight to use but the underlying processor power is pegged at MegaSTe level.

On the other hand, GEMulator offers upwardly-mobile processor performance - but even with the help of NVDI, graphics performance is frustratingly slow.

The Janus card is a remarkable piece of hardware that shows great potential. Unfortunately, the compatibility problems make it difficult to recommend at the moment, although this may be down to the particular driver supplied for this review.

Cost-wise, Janus is very expensive, especially when compared with GEMulator although the graphics performance is dazzling. Perhaps the situation will change after further, planned development.

MODES

Support for ST medium and low resolutions hasn't been implemented but there are six "dual" mode 16-colour resolutions. According to GEMBench graphics results, they're faster than a TT for some functions! Since raw processor performance is in line with the on-board 16MHz 68000 unit, it's apparent that something unusual is happening. The enhanced graphics performance is possible because lanus diverts most non Atarispecific system calls to the PC's main processor. This results in lightning fast desktop performance so creating the illusion of all-round power which dazzled onlookers at recent Atari shows.

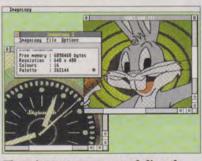
Understandably some software doesn't like this arrangement. Usually the offending software won't work on the Falcon either. The solution that persuades most "fussy" software to behave itself is to switch to "compatibility mode", namely ST high resolution.

Most system tweaks and patches that access the ST hardware directly won't work or are no longer necessary; in most cases the reasons are pretty obvious. Examples include NVDI, Kobold and X-Boot although NVDI works fine in "compatibility" mode while Kobold works using "GEMDOS" mode for file operations instead of the super-fast custom routines.

COMPATIBILITY

Both lanus and GEMulator offer a remarkable level of compatibility; most software, with the exception of MIDI applications and games, runs

Although the manual suggests that the PC serial and parallel ports can be treated as normal Atari ports, a modem connected to the serial port couldn't be accessed and there were problems with a Laserlet printer connected to the parallel port. Since both ports function perfectly under DOS, Windows and with the GEMulator this suggests a problem with the Janus software driver. The documentation refers to "alternative drivers" for different PC hardware set-ups but only a single driver was provided for this review. Output from



These images were opened directly from the Compo Power CD ...

PERFORMANCE OVERALL ノノノノノノノノノノノ EASE OF USE **ノノノソノノ**ノノノノ DOCUMENTATION VVVVVVVVV **EFFECTIVENESS** VALUE FOR MONEY VVVVVVVVV

A SEA OF CDS

ast time we looked at the Atari CD-ROM scene there was only one Atari-specific CD available (GEMini) and the software necessary to make use of the new technology was also scarce. Since then the situation has changed dramatically with four new CD-ROM discs on the market, cheaper drives and flexible software. In fact, CD-ROM technology is looking even more attractive now that you can also play audio CDs from your ST.

Three of the four CDs on review originate in Germany and contain mostly German programs with hardly any English versions. However, this is still a good way to check out all the latest software in Germany and then get an English version from a PD library. All the CDs contain public domain and shareware programs as well as clipart, sound samples and demos

BERND LOHRUM #1

This disc contains just over 250Mb of data in two folders. One folder contains all the files while the other has identical contents in compressed form. Effectively, there are 168Mb



Bernd Lohrum #1 – lots of utilities and demo programs but in German...

... or four at least! Ofir Gal grabs his caddy and checks out the latest Atari-specific titles.

of files on disc, divided into 13 categories. The **Demos** folder contains demo versions of *Arabesque*, *Ease*, *Interface* and *TruePaint* to name a few. **DFUE** holds a number of comms-related programs while **Editors** contains working versions of *Alice* and *Everest v1.5*. There's even a ZX81 emulator with over 100 8-bit games, over 100 ST games and a **Falcon** folder with the *Backward* STe emulator as well as Falcon-specific utilities such as the Atari JPEG decoder.

Other folders include the MiNT distribution kit, programming documentation and virus killers. The Utils folder contains no less than 200 utilities from corner clocks to system patches, various CPX modules, mouse accelerators, file copiers and disk formatters – you name it, it's here.

The main disadvantage of this CD is that there is very little here for the non-German speaking ST owner. A pity – many of the programs look very useful and the only hope is to locate an English version via bulletin boards or PD libraries.

BERND LOHRUM #2

This CD is dedicated more to clipart and sounds, but also includes a healthy collection of programs. There's 41Mb of monochrome clipart, 6Mb of sounds in various file formats and an ample collection of shareware and PD programs weighing in at some 134Mb. Among these is a massive folder dedicated to desk accessories and another with dozens



Bernd Lohrum #2 – another German offering but at least the clipart and sounds rise above the language barrier!

of database utilities. The Last_Min folder has 200 varied programs while Packer includes a large number of archivers including ZOO, LHARC, ZIP and even documentation of the various compression



The Mega Archive – almost two gigabytes of data from the largest Atari archive.

algorithms. Allied to this is a huge collection of programming documents and GEM libraries for C and GFA BASIC. You will also find a number of alternative file selectors, various GDOS utilities, font editors and the usual collection of RAMdisks and disk copiers.

As on the first disc, programs are supplied both in packed and unpacked formats. Unfortunately, it also exhibits the other trait – most programs are in German, but the clipart files cross the language barrier quite well!

THE MEGA ARCHIVE

The Internet gives comms users access to massive storage areas known as FTP sites. These computers hold thousands of files and one of the largest Atari FTP sites in the world is located at the University of Michigan. Known as the Atari Archive, this CD is a copy of the Atari section including a full index file which itself occupies a massive 300Kb!

The disc contains about 500Mb of compressed files, with an effective capacity of nearly 2Gb when uncompressed. There's masses of shareware



Mega mania – the first UKproduced Atari-specific disc, courtesy of System Solutions.

BUYER'S GUIDE

UNDER THE SPOTLIGHT...

Who what and where

	Bernd Lohrum #1	Bernd Lohrum #2	Atari Mega Archive	Compo Power CD
Company	System Solutions	System Solutions	System Solutions	Compo Software
Contact	081-693 3355	081-693 3355	081-693 3355	0487 3582
Price	£24.95	£24.95	£24.95	£9.99
Capacity	168Mb	180Mb	400Mb (compressed)	392Mb
Language	German	German	English	German
ST Review rating	000	0000	00000	0000

and PD programs, accessories and utilities of all description, most of which are quite up-to-date. With an all-round large selection of English programs and files, the Atari Mega Archive would be the best CD to start off with. The only disadvantage is that while having all the files compressed gives good value for money, it does mean that you have to unarchive each file before you can try it out. The *Two-In-One* utility is supplied alongside the popular archivers to make this a little easier. Thoroughly recommended.

COMPO POWER CD #1

With just under 400Mb of data, mostly German shareware and PD programs with a good number of demos thrown in, the Compo Power CD is a very good selection of the best German programs.

There are 15 folders in total. ACC_CPX contains dozens of accessories and *XControl* modules while BILDER holds true colour TIFFs and a large number of GIFs covering the likes of dinosaurs and raytraced images.

There are demo versions of Overscan's Overlay, InShape, Studio Photo and That's Address. The Falcon section is also very large, including utilities, demos and more.

The Compo Power CD is so good, it's such a shame that it's all in German. Still, at only £9.99 it is well worth buying.

VERDICT

A CD-ROM set-up is becoming quite attractive to Atari owners, especially those of you who already have a hard disk with a host adaptor.

The range of CDs is growing – and with SpeedoGDOS 5 and NVDI 3 available shortly, you could also use the drive to access thousands of fonts.

While the ST scene is still lacking programs to interface with the widely available CD-ROM encyclopædias and other so-called multimedia CDs, perhaps some success with the current range will lead to the development of such software...



Compo Power CD #1 – excellent value for money with lots of desk accessories and demo programs.

SUPPORTING CAST

A CD-ROM drive requires a special software driver. If you use MiNT or MultiTOS, you can install the Atari .XFS driver but this is rather slow. Standard versions of TOS can use MetaDOS, another Atari product that is freely available, but the reliability of this is dubious.

The best current solution is ExtenDOS, a commercial CD-ROM driver that incorporates a caching system so greatly improving disc access. The Proversion also includes an audio CD player. What you get is an Auto folder program, a con-



ExtenDOS Pro includes an audio CD player that can run as a desk accessory or a stand-alone program Editor: EXTENDOS.CNF

File Block Search Options Line: 3 Cel: 0

J+BOS, C:\EHTENDOS\CD.BOS T=16, Z:5

J+DOS, C:\EHTENDOS\UNIDRIVE.DOS P=12 B=2 R/W, P:Z

D

D

D

figuration file and several drivers that all reside in a folder named ExtenDOS. The installation involves copying all the files to your boot drive and then editing the configuration file in a text editor. Fortunately, there's a sample file that sets up the CD-ROM drive as partition P.

As CD-ROM drives are notoriously slow compared with a typical hard disk, ExtenDOS uses a caching system to speed up CD access which is especially noticeable when browsing through folders. The cache size can be adjusted through the configuration file to obtain optimum performance.

All of the compatibility problems appear to have been ironed out and the latest version supports single and multi-session PhotoCDs. The Pro version includes an audio player desk accessory which looks and works much like the front panel You only require these two lines to set up a CD-ROM drive with a device ID 5 as drive P.

of a standard CD player. It also incorporates shuffle and repeat functions and a volume control slider. While the user interface could do with a bit of polishing, this accessory works very well and allows you to use your CD-ROM drive as a standard CD player.



83*

OVERALL

SHOPPING LIST

System Solutions offers a system based around the Apple CD300e and ExtenDOS. Housed in a grey, high-quality case, the front panel includes an eject button, a volume control knob and headphones socket. At the back there are two SCSI ports, a SCSI ID selector, the power switch and a pair of stereo phono connectors for the audio output.

The CD300e replaces the CD300 model, the main difference being the lack of a caddy. Instead it uses a CD drawer system, similar to that found on domestic audio CD players. This is much more convenient – the caddy system is clumsy at best.

The drive is a double-speed multi-session mechanism with an average access time of 300ms and a transfer rate of just over 300Kb per second. It

can play audio CDs and is PhotoCD-compatible. These figures are the fastest available at present and while there is talk of quadruple-speed drives in the not too distant future, this new technology is likely to be expensive to start with.

The Apple CD300e is a high-quality, caddyless CD-ROM drive with audio and PhotoCD support.

PRICES

CD300e, ExtenDOS and SCSI2 lead for Falcon: £289

CD300e, ExtenDOS and Translator for ST/STe: £339

CD300e, ExtenDOS and ICD Link 2 for ST/STe: £359



Fed up with your spongy Atari keyboard? Like to use a high quality off-the-shelf PC variety? Then AT Key may be the answer as Ofir Gal finds out...

hy are ST keyboards so expensive? The reason is that the ST's powerful keyboard controller chip is also responsible for mouse and joystick operation, which is not the case with a PC. While this does not explain why the Falcon and ST keyboards are of such poor quality, the large quantity production of PC-compatible keyboards leads to them being better and cheaper in most cases.

Can you plug a PC keyboard into your ST? No, but there is a solution in the form of AT Key, an intelligent device that interfaces between the ST and any AT-compatible keyboard.

The unit includes three ports: one for the PC keyboard and replacements for the Atari mouse and joystick ports.

As PC keyboards do not have either the <Help> or <Undo> keys, two unused ones take over these functions. This takes a little getting used to – but it's worth it just for the positive feel of the PC keyboard.

PLUG THIS!

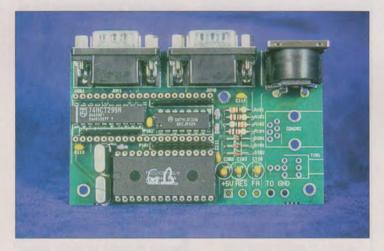
AT Key is designed for internal fitting in DeskTopper and Tower systems but can also be fitted externally to a standard ST with a suitable case. An installation sheet is included with the package.

The installation on a DeskTopper or Tower system is quite simple. The

KEY FACTS

Product:
AT Key
Company:
System Solutions
Contact:
081-693 3355
Price:
£49.95
SYSTEM
Any ST or Falcon
although the DeskTopper
or a Tower system
is recommended.

KOOL KEYS



wires connected to the keyboard socket are disconnected and soldered to the unit.

The keyboard controller from the original ST keyboard is removed from its socket and plugged into the available slot on the AT Key. The kit is mounted at the rear of the DeskTopper or Tower and then the keyboard, mouse and joystick are plugged into the AT Key sockets.

If you want to install the kit on a standard ST or STe, you'll need to buy an additional cable to take the place of the present keyboard connector. The ST has to be opened up, the keyboard unplugged, the connector soldered to the new cable and the other end of the cable and the other end of the cable of the installation is the same but you'll have to purchase a case from Maplins or Tandy and place the board in it.



The AT Key kit includes a PC keyboard port as well as standard ST mouse and joystick ports.

STEP BY STEP GUIDE

UP AND RUNNING

Installation of the AT Key kit varies according to your set-up, but it's fairly straightforward - only four wires need soldering. You'll need a soldering iron, hand drill, Philips screwdriver and a file...



This is the view from the back of the DeskTopper. Plug the PC keyboard into the round socket and the mouse and joystick into the other two sockets.



Remove the soldered wires from the keyboard socket at the front or rear of DeskTopper and connect them to AT Key instead. Remove the keyboard controller chip, found underneath a standard ST keyboard, and place the chip in the empty socket on the AT Key board.



Place the kit at the back of the DeskTopper and drill three holes to screw the AT Key board into position. Plug the lead into the ST motherboard. The back panel of the DeskTopper will need some filing before the board fits perfectly.



The finished kit is a neat set-up with a high quality PC keyboard instead of the old ST one. The bow tie is not included in the price...

pseudo 24-bit palettes. Images and

animations can be overlaid on top of

each other, or behind each other,

and the palette can be controlled and

altered in RGB, CMY or HSB modes.

Perhaps the cleverest part of the

program is the way it treats palettes.

making it easy to add files with

specific palettes, like GIFs, to true

colour animations quickly and easily

using various matching techniques.

The interface is superbly designed with everything on show.





Video digitiser support - the real-time monitor image is in the top right.

REACHING THE APEX

f ever there was a program that could have turned the Falcon from a specialist machine into a real multimedia station with wide appeal, it was Chroma Studio 24, the unique, innovative animation package from Black Scorpion Software. Unfortunately, due to development difficulties, it never arrived and the Falcon scene was all the poorer for it.

The good news is that work on the second generation product, Apex Media, is well advanced and up against no such problems. At first glance it has many similar features to Chroma but in reality it is light years ahead. Many of the effects involved are an order of magnitude faster and there are no less than 14 everyday operations that use the Falcon's superfast DSP chip, allowing Apex to carry out many special effects transformations such as block distort and animation filtering almost in real

Other additions include support for the Exposé and Matrix ScreenEve video digitising cards, anti-aliasing, smoothing, noise removal and motion blur filters for animations and digitised films, some unique interpolative tools that can "sense" underlying colour changes and a number of minor improvements to various drawing tools. There is also an expanded range of import/export formats and a new supersampling feature that allows images to be rescaled to fit the Apex canvas without losing any of the colour depth or

Andrew Wright takes a sneak look at the brand new multimedia system the Falcon world has been waiting for ...





Apex loads all manner of images...

WHAT YOU SEE

The most obvious difference might be seen as a cosmetic one but closer examination shows that the new interface has been redesigned from the ground up. Instead of long toolbars along the top of the screen or an unwieldy list of pull-down menus as in many GEM programs, Apex uses a similar approach to Calamus. In other words, select an icon relevant to the task you want to carry out and the left-hand side of the tool area changes, offering dozens of subsidiary options.

This lack of a GEM interface isn't

TOOLED UP The range of tools is phenomenal. On the top tool bar, from the left, are the standard drawing tools (lines, shapes and fills), block manipulation (rescale, distort and paste), colour palette manipulation, and the video digitising interface. Next come the non-linear tools like the realistic airbrush and masking, film and

> Apex also has a full range of drawing tools.

without reason. Black Scorpion Software has ditched the sluggish GEM display routines and replaced them with its own, much faster code that takes up far less memory. The result is that you can achieve almost anything on even a 4Mb machine.

As a multimedia tool, it can handle several graphics formats, including Targa, GIF, IFF, Spectrum 512, Photochrome, MTV raytrace, the indispensable JPEG and several animation formats such as AM, SEQ and the industry-standard FL? formats. It will run on any Falcon with 4Mb or more memory and as it uses its own video modes, you can select from 320 by 200, 320 by 400, 640 by 200 and 640 by 400 pixel screens with 256 colour, 16-bit or even

image filters, morphing and distortion and outline text (using Calamus fonts).

This impressive collection offers just about every tool you could wish for in a painting, digitising and animation package and should go some way to seeing it take off as the ultimate Falcon program. Much depends on the manual, of course, because the program breaks so much new ground, but the projected size is a hundred or more pages with tutorials and a number of sample images to work on. Chroma might go down in history as the art/animation package that never was, but Apex should be able to rewrite history as the best animation and digitising program the Atari world has ever seen.





UNRIVALLED FEATURES

© 1994 PCM

IMAGERY

Comprehensive drawing and filtering tools include a soft airbrush and analog masks for superb, fast retouching

Extensive Deltafilm and direct-from-disk sequence and editing facilities

Software interface allows the user to capture live video as stills or animation from hardware digitisers such as TITAN Designs' Exposé

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Tel/Fax: +44 (0)21-414 1630 CIS: 100345,2350

Cheque, VISA, Access or Mastercard

APEX media is © 1994 **BLACK SCORPION SOFTWARE** How does a professional company redesign its adverts? Vic Lennard visits System Solutions to see the Medusa and DA's Layout in action...

Ithough there are still a fair number of retailers and distributors supporting the Atari market, only one creates its own adverts on an Atari-based system: System Solutions. By using the image setter owned by its sister company, Sumner Type, it then supplies final output film to the various magazines in which its adverts appear, including ST Review.

While colour has been used in previous adverts, this only stretched as far as sparingly-used spot colour. Part of this reason is that all adverts were designed with *Calamus SL* on a TT using a large mono monitor.

Consequently, on-screen colours had to be judged from a dithered mono appearance.

TIME FOR CHANGE

Recently, the two companies decided to invest time, energy and money in a full-colour system centred around the new Swiss super-computer, Medusa. Along with a 17-inch Idek



Interesting logo – but if you look carefully you'll see the letters "FA" which stand for Fradi Aschwanden, the Medusa's inventor.

monitor and a Matrix 32-bit colour card, the system is truly awesome as the information in the *Performance Plus* box shows.

The two employees in charge of laying out the ads, Gordon Drayson and Rob Perry, also felt that it was time to investigate the advantages of DA's Layout TC over Calamus SL. Being able to easily create blends and gradients was a distinct asset, but two points really swung it in the former's favour: the support for true colour and the use of screen-resolution graphics embedded into a file with a link to the master images.

This last point reduces the size of DA's Layout files and allows you to work with a master folder of >

CREATING WAYES

PERFORMANCE PLUS

Ofir Gal looks at the techie side of the Medusa super-computer...

The Medusa T40 is a TT-compatible machine that allows current ST and TT owners to get the benefits of a fast and sophisticated Motorola processor, the 68040. This is closely compatible with its smaller brothers, the 68000 (as used in the ST) and 68030 (TT and Falcon), so all correctly-written programs should run on the Medusa without any problems.

The 040 chip is double-clocked at 64MHz, some eight times faster than the basic ST, but this does not give the full picture. As the 040 is also more efficient, even if it were clocked at a mere 8MHz it would still be much faster than the basic 68000! It also incorporates a built-in maths coprocessor (FPU), giving fast floating-point calculations, and a Paged Memory Management Unit

Function

VDI Text

VDI Graphics

RAM Access

VDI Scroll

Graphics

Average

CPU

GEM Dialogue Box

(PMMU) for virtual memory applica-

With the main 32-bit bus clocked at 32MHz, the Medusa is capable of accessing its memory at very high speeds. For compatibility purposes, an Atari-like 16-bit data bus is also included. Performance is quoted at 26 million instructions per second (MIPS) compared with 4 MIPS on the Falcon which is also held back by its 16-bit bus.

The basic system supports various memory configurations ranging from 8 to 128Mb of RAM. If that's not enough, a separate expansion card is available to bring the total up to 4Gb of memory which can be accessed at speeds of up to 85Mb per second! This is a good example of the way the whole system has been designed to be open-ended

and expandable.

There's a standard, high density floppy disk drive, but the Medusa is designed to work with the new 2.88Mb extra high

density drives as well. There is a built-in IDE interface, an optional SCSI one and depending on the configuration, an Atari or PC graphics cards can be used. There are also six expansion slots on the main bus and another four on the Atari-compatible bus.

Various add-ons are under development. A 32-bit, 32MHz true colour graphics card that connects directly to the main bus is in the pipeline, as is a 68060 adaptor card that will allow you to upgrade to the new Motorola processor as soon as it's available, with an optional 4Mb second level cache. There is even a plan for a DSP board for audio-visual applications.

The Medusa is so fast that even the most powerful Apple Mac or PC-compatible seem slow in comparison. It is certainly faster than any TT or Falcon and the speed simply has to be seen to be believed. Check out the *GEMBench* figures below comparing a Medusa and a TT to an ST...

Redusa T40 Cache Verwaltung (c) 1993-1994 by Nedusa Computer Systems VI.0 (81.85.94) daten cache sin aus cache node mits through copy back nostruction cache sin aus cache node mits through copy back NU Screen Unleakung as cin aus Nachine Type in Cookie 11 51 Robruch Rebruch

The Medusa Control Panel allows you to turn the various caches on and off for maximum compatibility.

100 192 667 100 876 2550 100 351 1169

174

127

403

486

150

All figures are percentages. References: STe with blitter in ST high res.; TT with FastRAM and coprocessor in ST high res.

POWER...

100

100

100

100

100

FROM THE INSIDE

The Medusa is essentially a single motherboard with various expansion slots. The System Solutions set-up includes 32Mb of RAM, a 1Gb IDE hard disk, with a transfer rate of about 4Mb per second, and four boards which, from top down, are:

Medusa

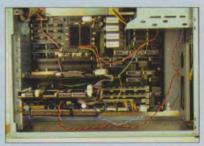
737 495

1056

919

194

- SCSI card: used to connect the Medusa to a hard drive, scanner or CD-ROM drive with a standard SCSI socket.
- Matrix 1208E: the Rolls Royce of graphics cards 32MHz, 32-bit colour and with 2Mb of video RAM on-board.
- VME card: interfaces between the graphics card and the Medusa.
- ST input/output: ensures ST and TT compatibility and includes MIDI, serial and parallel ports plus the Yamaha sound chip.



- ✓ graphics. Gordon's first task was to reproduce System Solutions' standard advert with DA's Layout. Following the successful reproduction of this in the November issue of ST Review, Karl Brandt, managing director, gave Gordon a basic brief for a double-page spread advert:
 - Focus on the various direct-to-disk Falcon digital audio products on the left page;
 - Incorporate all other products on the right page with better "signposting" than the previous adverts.

Having decided to use *DA's Layout* as the DTP program, the choice of graphics packages was simple: *DA's Picture* and *DA's Vector Pro*. The street maps were created in the latter while the former was put to good use with the ten product signposts for the

right-hand page. Screenshots were taken with *Imagecopy 3* and saved as compressed TIFFs.

Both the Falcon and the MiniS hard drive pictures had various elements that needed to be hidden. Using DA's Layout's clipping path facility, this was achieved easily. Digital Arts' expertise with both vector and bitmap graphics most certainly shows in the myriad of functions that DA's Layout sports.

THE PROOF...

A successful venture? Judge for yourself by looking at the final advert in this issue. Suffice to say that the Medusa-based system will now be commissioned by Sumner Type for commercial typesetting work – and System Solutions will have to wait in line...



Serious system - Gordon Drayson of System Solutions with the Medusa T40 running DA's Layout.



Pretty pictures - snapshot from Ease's Icon Editor, the ten signposts had a white outline added in DA's Picture.

CONTACTS

CGS Computerbild (081-679 7307) – DA's Layout, Picture, Vector.

JCA Europe Ltd (0734 452416) – Calamus SL.

System Solutions (081-693 3355) – Medusa, Ease.

Sumner Type (081-693 3364) – professional design and typesetting.

FaST Club (0602 455250) – Imagecopy 3.

EYE CATCHER

Andrew Wright considers the advantages of DA's Layout...

Calamus doesn't have it all its own way in the world of professional DTP. There's plenty of competition from Digital Arts with a superb suite of programs that includes DA's Vector, DA's Picture and DA's Layout. The latter is perhaps more suited to short, design-intensive documents such as leaflets, brochures and adverts than Calamus SL and has a number of features to make the graphic designer feel right at home.

DA's Layout uses the traditional pasteboard approach where objects such as text, graphics and images can be placed around the page and dragged onto it when required. Although all of DA's programs work in full 24-bit colour, the "TC" (true colour) version of DA's Layout allows a realistic colour representation of the page, an invaluable aid for designers. This is made much more accurate by the inclusion of a colour correction module that lets you match the colours on-screen with those in printed reference charts.

The program's ability to contain objects on different layers makes complex documents much easier to edit, and objects can be moved or copied between layers very easily. For example, if you design an advert based on a large colour image, overlaying it with various text and graphics objects, it can be hard to get at objects sandwiched between others. DA's Layout lets you name the layers and edit each one individually.

In high end DTP, features like text, image and graphics rotation are essential but *DA's Layout* goes even further with various simple transformation tools like stretch and skew that can be used on text objects and vector graphics. If yet more artistic effects are required, there is a calculator for mathematical effects and a grid for wrapping objects onto 3-D shapes such as spheres.

DA'S LAYOUT FILE OPTIONS

DA'S LAYOUT FILE OPTIONS

ATARIST REVIEW

ATARIST REVIEW

ATARIST REVIEW

effects and a grid for wrapping objects onto 3-D

A's Layout adopts the pasteboard approach that designers are used to.

Other tricks are available too. The multiple copy function lets you program any number of copies of an object, be it a graphic, a text object or even a 24-bit colour image. This is particularly useful for creating special effects such as colour blends, 3-D text and artistic shadows.

Text is vital too, if you want to get a clear message across in an advert or poster. In this department, *DA's Layout* is quite excellent, especially as it has the ability to use *Calamus* or PostScript outline fonts. And if that wasn't enough, you can even design or edit fonts in the built-in font editor...

The superb colour handling makes for great, eyecatching adverts.





Some blinding special effects are possible - like wrapping text around a grid.



STEP BY STEP GUIDE

DYNAMIC DESIGN

Follow our step by step to see how Gordon Drayson designed System Solutions' latest advert...



Cvan has been selected for the background colour and the System Solutions and Atari Workshop logos, both Calamus CVG files, incorporated into the side straps. The guide lines will ensure that all boxes align correctly.



Two information panels are then laid in. The System Solutions one has a mid-linear blend from red to yellow, with the logo inversed out in white, while the Atari Workshop panel's black border (or key line) is finer on top.



The left-hand page is going to concentrate on the Falcon and digital audio. A picture of the computer is placed in the centre of the page with a circular, cyan to light-cyan blend behind it for accentuation.



"No man is an island" - and neither is the Falcon! Cubase Audio and Notator Logic Audio screenshots are placed to the left with photos of a Minis hard drive and the hardware boxes to the right, all with captions.



To complete the page, all relevant text is added using Kord typeface in different weights and colours. Even with the text in place, the centre-stage Falcon is still the focus of attention thanks to the blend from step 3.



Now to the right-hand page. A couple of nifty maps, created in DA's Vector, are placed above the Atari Workshop panel along with their supporting text. Final tweaks to these graphics are carried out in DA's Layout.



With ten categories of products to be mentioned on this page, a set of icons are used to draw the reader's attention to the crossheads. Created courtesy of Ease and DA's Picture, the "signposts" are rotated into place.



8 Using DA's Layout's text editor, all text for the page is entered and then placed box by box into the advert with different weights and colours of Kord being used. As for the final advert check it out on pages 16 and 17...

Supplying Atari Users For Over Eight Years

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GD2275 DCS Compilation
GD2284 PACMAN ON 'E's
GD2290 MEDIEVAL CHESS
GD2315 STARBALL & PAINTER GD2352 DARTS GD2357 FRANTICK (2 Disks)

EDUCATION GD1883 WEATHER TIME GD1884 PLAYTIME GD1888 ALGEBRA GD2184 ADVANCED FRANGLAIS GD2248 CLOCKTIME GD2283 ST GLOBE GD2176 PICTS TO PARL' 3 GD2293 PICTS TO PARL' 4 GD2296 ROMAN EMPIRE GD2299 LABORANT PRO GD2273 KV PHONIC

HOME & OFFICE GD1601 IDEALIST GD1672 DB WRITER GD1673 DB WRITER EXTRAS GD2064 ROUTE FINDER GD2175 INVOICE MASTER GD2255 RECIPE BOX GD2198 MARCEL WORD PRO GD2295 HEBREW WORD PRO GD2291 CAL MUSIC FONT GD2209 SUPERCARD 3 GD2254 O.C.R. GD2318 GROCERY LISTER GD2347 ADDRESS MANAGER GD2317 EVEREST & GRAMMAR

STOSSER DISK MAGAZINE ALL ISSUES TO 18 AVAILABLE

SPECIAL INTEREST GD1380 MORSE CODE GD1853 GERMAN TRANSLATE 3 GD2187 FAMILY TREE GD2251 R.A.E. TUTOR DEMO GD2271 BATTERY EXPERT GD2203 ZX81 EMULATOR GD2205 SPECTRUM EMULATOR GD2331 ST NEWS 9.1 GD2355 ST NEWS 9.2 GD2250 DATACHESS 2 (2 Disks) GD2278 CREATIVE TITLES 2 GD2338 BIORHYTHM

GD2065 LET THEM FLY (English) GD2120 TERRA DESK 1.40 GD2280 MASTER BROWSE 4.5 GD2129 TWO IN ONE (English) GD2173 ST ZIP 2.6 & LZH 3.1 GD2188 MOUSE KA MANIA GD2314 OMEN GD2326 ICON JUGGLER

TRACKER GD2259 STORMTRACKER DEMO GD2286 OCTALYSER STE

GRAPHICS GD1347 PRINTING PRESS (English) GD1348 PRINTING PRESS Support GD2020 CRACKART (English) GD2035 GEMVIEW 3.05 GD2038 KOZMIC 4 GD2055 KADINSKY GD2277 ART FOR KIDS DEMO GD2308 MULTICAD GD2309 SPEED OF LIGHT 3.5

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NEXT MONTH

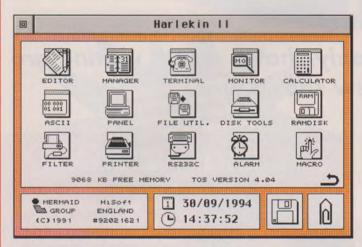
Next month's cover disks bring you a pair of incredible programs...

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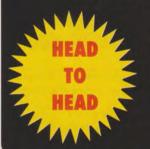
OBSESSION - THE SUPREME STE GAME

This issue's feature on Unique Development Sweden and its incredible pinball game, *Obsession*, has probably whet your appetite. Next month, we bring you a fully playable, *ST Review* exclusive version!



Fantastic fun
– play Obsession,
the final word in
slick gameplay!

NVDI 3 & SPEEDOGDOS 5



The two system heavyweights battle it out first in these pages! The technical and practical facts – only in ST Review.

ON SALE NOVEMBER 21
- PLACE YOUR ORDER NOW!

IT'S SHOW TIME!



If you're an Atari owner, the only shows worth visiting are the ST Review shows...

WHY?

Because people who visit our shows return time and again – they're the only opportunity for you to meet the top ST companies, see the latest new releases for Atari computers and buy at special show prices. Exhibitors at our shows go to the trouble of demonstrating their products – not just piling them high behind a counter. With four events in the UK before Christmas, these shows are truly nationwide. All venues are conveniently located near to main roads and rail/tube links which means that everyone can attend.

WHAT'S ON SHOW?

While you can buy games at our shows, these are not games shows. They are for the Atari user who does more than just zap aliens! Top companies like Atari Workshop/Systems Solutions, CGS, Compo Software and Titan Designs have already confirmed that they will be at all four shows again, as well as ST Review of course. Now's the time for you to experience an ST Review show.

VISITORS MEAN PRIZES

Yes – if you visit the show you could win one of our prize draws. £100 of prize vouchers must be won in our prize draws at each Show. Anyone who attends can win!

FIXING AND FITTING SERVICE

Any hardware you buy from any stand can be fitted to your computer for a small fee at the Compo Software stand. What's more, if you are bringing your ST in for an upgrade or a repair you get into the show for free!

QUALITY SHOWS



I was genuinely surprised at all the new products on show at the London and Bristol shows a few months ago, especially as I saw a number of products we hadn't even reviewed in our magazine! As editor of ST Review, I'm proud that we sponsor these shows. All of the people I talked to at the last two shows had nothing but praise many visitors came for a quick look round and ended up staying all day!



HOW TO GET THERE

GLASGOW SHOW – FORTE CREST (041 248 2656), BOTHWELL STREET, GLASGOW G2 7EN, SATURDAY NOVEMBER 12, 10AM TO 5PM.

BY ROAD:

- Exit the M8 motorway at junction 19 and turn left at the first set of traffic lights into Argyle Street
- Take the third left and follow the road round to the left to Cadogan Street
- Take the first right into Douglas Street and turn left at the "Give Way" sign
- Cross over Waterloo Street and turn right at the sign for "Local Traffic"
- Stay in the right hand lane and turn right at the next set of traffic lights to find the hotel.

BY RAIL:

- GLASGOW CENTRAL take the Gordon Street exit, cross over Gordon Street and proceed left towards Hope Street
- At the junction of Hope Street and Gordon Street, cross over and walk 40 metres to the right to Bothwell Street

- Forte Crest is 400 metres on the right hand side
- QUEEN STREET walk through George Square and turn right on to St. Vincent Street
- Proceed to West Campbell Street to the first junction,
 Bothwell Street, and turn right
- Forte Crest is 300 metres on the left hand side

LEEDS SHOW – HILTON NATIONAL (0532 442000), NEVILLE STREET, LEEDS LS1 4BX, SUNDAY NOVEMBER 13, 10AM TO 5PM.

BY ROAD:

- M1 take junction 47 and follow signs for City Centre for about 3/4 mile. Hotel is on the left
- M62 MANCHESTER take junction 27 on to the M621 to the end. Follow signs for the City Centre for about 1/2 mile. Hotel is on the left
- M62 HULL take junction 29, join the M1 North and take junction 47. Follow signs for City Centre for about 3/4 mile. Hotel is on the left



THE LATEST MAGAZINE

Make a bee-line for the
Go Direct stand as soon as
you walk in the door. You'll
be able to pick up the latest
issue of Atari ST Review at
all four Shows!

BACK ISSUES

If you've been following a series and missed the last one, or you were looking forward to the next issue but can't find it at the newsagents, you'll know just how disappointing it is to miss out on an issue. Well, never fear! You'll find various back issues of Atari ST Review and Atari ST User on sale at bargain prices at the show.

Tickets

- All tickets on the door no advance bookings
- Tickets cost £5, £3 for entry after 2pm
- Children under 16 are free when accompanied by an adult
- Free admission if you bring your computer along for fitting or fixing at the Compo Software stand.

NEXT MONTH

Full information on the Birmingham (Saturday December 10) and London (Sunday December 11) Shows...

Organised by David Encil, Neal O'Nions and Ray Cross

HAVE I GOT NEWS

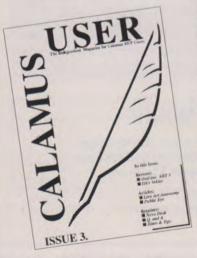
Want something to read in between monthly issues of ST Review? Join Nial Grimes in a safari through the ST fanzine jungle...

by when the only computer magazines available were produced by enthusiasts on a very tight budget. Of course, large publishing houses quickly changed that, but the back bedroom operations continued and fanzines have remained very much a part of computing culture.

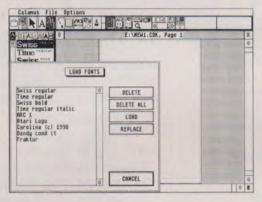
The fanzine's main strength has always been its ability to offer a slightly different style of article to mainstream magazines. Life is presented very much from a user's point of view and you'll usually find anecdotes, hints and tips, and even solutions to complex programming problems. No matter what your interests, there's an ST fanzine to suit. Let's take a closer look at three of the best...

CALAMUS USER

Calamus is probably the most widelyused desktop publisher on the ST, and yet it's also one of the most difficult to grasp. Calamus User is a magazine that aims to help



Calamus User – aims to help you get the best from your Calamus set-up...



A "font repair" service can be had by Calamus User subscribers and a good range of "fixed" typefaces are held on file.



Calamus-related PD is also available through the mag at very affordable prices.

struggling DTP fanatics to extract the most from their set-up.

All versions of the program are dealt with in roughly equal measure and the magazine itself is designed and printed with SL. Not only does it deal with Calamus, but also related packages - Outline Art 3 and DA's Vector are both given space in issue 3 and the news section even stretches as far as mentioning useful extras such as the MagiC operating system. A regular question and answer column is at hand to provide specific tips. Essentially for a magazine of this type, you do get the idea that people know what they are talking about in other words, they obviously use Calamus! The editorial is literally dripping with useful work-arounds that the manual overlooks or doesn't explain clearly.

Calamus User is in A4 format and printed professionally on quality, glossy paper. The staple binding down the left-hand side of the page spoils the effect a little, but it remains quite a classy affair. Generally, the grammar lives up to this standard too – there are one or two slip-ups certainly, but they are not serious enough to make you want to stop reading the magazine.

I suppose the design of a DTP-oriented magazine is bound to come under scrutiny and in this regard Calamus User is definitely improving with age. There is a slight tendency to cram as much text onto a page as possible (reinforced by a tight leading) but it's certainly heading in the

right direction. Attractive logos for the various sections have been introduced into issue 3 and the level of illustration has also been beefed up. The result is quite a balanced magazine.

You can't help feeling that from a commercial point of view, Calamus User would do well to encompass other DTP packages. However, Calamus fans should certainly give it a go, and for your £3 you are guaranteed to get around eleven pages of dedicated editorial.

ST APPLICATIONS

ST Applications is the longest serving club-magazine for Atari computers. It started life as a newsletter and has slowly grown into a thriving monthly magazine for the hardened ST enthusiast.

Almost every aspect of ST usage, from desktop publishing to programming, is covered and the review style

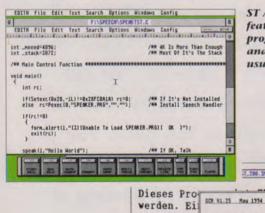


ST Applications – the serious enthusiast's magazine...

can only be described as "exhaustive". There are regular columns dealing with shareware, communications and just general opinions on Atarirelated matters.

You'll find that news of most major software releases reaches *ST Apps* in time and while the editorial style sometimes lacks fire, it does give you a good idea of what a package is like to use.

A large section known as the "Forum" is included in every issue and here readers can discuss ST-related problems or submit hints and tips for publication; it's about as close as you can get to a bulletin-board conference outside of the on-line community. A separate section is



ST Applications features an excellent programming column and C source code is usually provided.

RE. Es dar

ber Mailbo

Additions to the ST Club's PD library are listed in the magazine and many of the programs are given coverage in the magazine itself.

FOR YOU!

LET'S TALK...

Ever wondered how difficult it is to put together your own magazine? We tracked down Paul Hayes to find out exactly what's involved in producing ST Handbook

ST Review: So, tell us a little bit about ST Handbook. What sort of scale is the operation and how many readers do you have?

ST Handbook: At the moment we're running at about 2,000 copies every two months and have readers in the UK, Canada, Norway, Sweden and Germany.

ST Review: How long does it take to put together an issue of the magazine and what software do you use?

ST Handbook: All told, it takes about six weeks to get an issue out of the door. Most of that time is spent writing and editing articles, and the design process itself takes about two weeks. Calamus 1.09n is the main workhorse, but we also use Outline Art and Arabesque Pro occasionally. It's a lot easier now we've got the style sheets together.

ST Review: What would you say are the best and worst aspects of running Handbook?

ST Handbook: There are lots of good things about running the magazine: the contacts you make in the Atari world are great and you also get a much wider view of ST software. The worst aspect is definitely the deadlines - I'll say no more...

ST Review: And finally, do you have any tips for people thinking of starting their own user-group magazine?

ST Handbook: Mainly, just make sure there's a market, advertise in the right places and keep at it!

designed to deal purely with programming problems. The ST Club also invites readers to write complete articles for the magazine and this leads to very varied content. For example, issue 45 contains an article on the history of the ST News diskzine, and another on directly patching TOS 2.06! Adverts from well-known companies are scattered sparingly through the mag and there's a well supported classified section, which is ideal for picking up obscure pieces of software and hardware. Subscribers also get benefits in the form of reductions on ST Club software and the occasional special

In terms of presentation, ST Apps is excellent. The layout is quite "texty" but a wide leading and legible font make the whole thing nicely readable. Grammatically, it's very good too and each issue runs to around sixty pages including adverts.

ST Applications is a good magazine for those who take their ST seriously. Its relatively formal style might not be everybody's cup of tea, but many of the articles it contains can only be described as unique.

ST HANDBOOK

ST Handbook is a journal dedicated to shareware and public domain software. If you had to use one word to describe the magazine it would be "enthusiasm"; these guys obviously love their STs. Reviews of dozens of PD programs (both new and old) are included in each issue, although there's no form of rating. Bolted to the front of the mag, you will find a cover disk packed with the best releases over the previous two months - for example, number 3 boasts Snacman, Dominoes Pro, an Operation Wolf clone and numerous

The latest cover disk includes Combat, a passable **Operation Wolf** clone.



ST Handbook - some excellent PD coverage and humour to boot...



ST Handbook is quite entertainment-oriented and the cover disk is packed with decent games.

utilities. The feature articles are all quite quirky, but full of useful information. The concept of printer drivers is tackled in the latest issue and you'll also find articles on subjects as diverse as assessing the quality of floppy disks and connecting a CD-ROM drive to the ST. Adverts and company profiles from sponsoring PD libraries are also a strong theme in the magazine.

Some original ideas even manage to creep into the editorial. Half a page each issue is dedicated to the "Judge" who must rule on an issue related to ST hardware and software. The Atari Mouse was forced to stand trial in the first edition and needless to say it was found guilty of being completely useless (and who said there's no justice... Ed)!

For a relatively young publication, ST Handbook is quite daring in its design. Outline Art has obviously been put through its paces and dynamic greyscales and bold headlines are used extensively. Despite the flashy effects, the magazine stays nicely readable thanks to a sanserif font and good spacing. The result is a professionally printed, A5 mag that feels as if it's well worth the £2 asking price. The grammar is not perfect, although it does look as if most of the text has been spell-checked.

Given the quality of the cover disk, ST Handbook is good value for money. Real effort has obviously gone into the design of the magazine and the result is very pleasing. Keep up the good work guys!

CONTACTS

Calamus User: P.O. Box 148, Deal, Kent CT14 7QN. Quarterly magazine - £3 per issue.

ST Applications: The ST Club, 7 Musters Road, West Bridgford, Nottingham NG2 7PP. Monthly magazine -£2.50 per issue.

ST Handbook: ST Handbook, 1 Fordhouse Lane, Stirchley, Birmingham B30 2NH. Bimonthly magazine - £2.00 per issue.

eggae came to prominence in the late '60s and '70s. Originating in the West Indies, primarily in Jamaica, and developed largely through improvisation, it is thought to have started many years ago when empty oil drums, thrown overboard from ships, washed ashore and the natives experimented with them. And so the steel drum was born. Well, you can believe that if you like but it is a view held by many musicologists!

Reggae is a very recognisable rhythm characterised by having its main hits on the offbeat. It also creates an impression of space even though it can be quite a busy rhythm at times.

We're using *Cubase*'s Drum Editor to illustrate the drum patterns. The darker the hits, the greater the velocity. Note where the accents are as these are very important in Reggae. However, don't be afraid to experiment with the velocities as the loudness of the drums may vary from instrument to instrument.

WELL ACCENTED

Figure 1 is the standard basic Reggae pattern that everyone will recognise. You could use a rim click instead of a snare if you want a lighter effect.

TOP REGGAE TIPS

- The Reggae rhythm comes from not having any hits where you most expect them. Notice the lack of hits on the first and third beats of the first example. Don't go overboard when you're adding toppings and try to leave those important gaps.
- Having said that, you'll notice from the other examples that the hi-hats can sit on the beat.
- Modern Reggae has lost much of the "oil drum" feel of the original Jamaican rhythms. You can put this back if your synth has any metallic oil drum-type sounds. We've added cowbells and timbales to our patterns as these can be found in most drums sets including General MIDI.
- When writing Reggae bass lines, go easy with the number of notes you use. You can, for example, create a good effect by leaving the bass completely out of the first two beats of every bar. Alternatively, the bass line could follow the snare as it appears in figure 1.

REGGAE, STEADY, GO!

Ian Waugh decides that it's time for some culture...

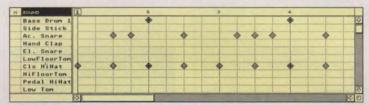


Figure 1: the standard Reggae pattern with accents in the traditional rock position on beats two and four.

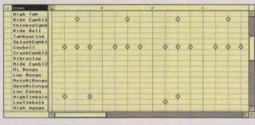


Figure 2: add toppings like these to just about any Reggae pattern - note how the hits are placed to leave space on the main beats.

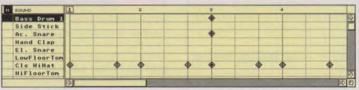


Figure 3: Reggae can also be based on triplets - this pattern is very sparse indeed but it still works.

Notice that the accents are in the traditional rock position on beats two and four.

Figure 2 contains two toppings. The cymbal and cowbell pattern could be added to just about any Reggae pattern and produces the sort of feel used on *I Want To Wake Up With You*. The timbale pattern can be used as a mild fill. Note how the

hits are placed to leave space on the main beats.

These patterns are based on 1/16th notes but Reggae can also be based on triplets. Figure 3 is the sort of pattern used on hits such as I Don't Wanna Dance. It's very sparse indeed – but it still works.

Many jazz musicians have picked up on the triplet Reggae rhythm, possibly because it has an affinity with the blues but also, perhaps, because it leaves lots of spaces in which they can improvise.

Figure 4 is a timbale pattern that could be added to create a fill and in case you're really not happy about having so few hits in your drum pattern, figure 5 shows some alternative lines. You can play this pattern as is or you could use the snare in place of the one in figure 3. Note that each of the snare hits here are accented.

Figure 5 also contains an alternative hi-hat line. You could use the hi-hats in figure 3 for one bar followed by those in figure 5 for the second bar to create a two-bar pattern. Nothing like a little variety, eh!

And still the bass drum doesn't have much to do. Well, that's the way it is with Reggae.

FINAL WORD

Reggae rhythms are great fun to play to. Set up some drum loops and jam along. You need to take care when creating the rhythm section that parts such as bass, guitar and keyboard don't mess up the groove. Sparse and offbeat is generally good. For example, try playing staccato keyboard or guitar chords on the second quarter note of every beat which some musos call the "and" — 1-and-2-and-3-and-4-and...

From the sublime to the, er, not so sublime. Next month we'll don our leather for some Heavy Metal!

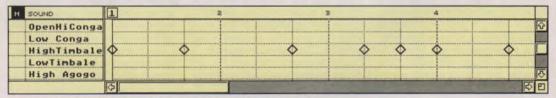


Figure 4: this timbale pattern makes for an interesting fill...

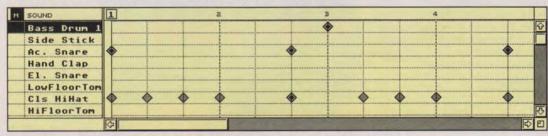


Figure 5: ... and here are some alternative lines with the snare hit accented.

RAP TRAX & HIT SHOT

Heavenly Music • £20.95 & £23.95 • 0255 434217

It's interesting to look at Heavenly Music's Rap Trax after our feature on programming Rap rhythms in last month's issue. There are 14 tracks here based on the CD/cassette Black Sunday by Cypress Hill. As this isn't in my collection, I can only comment on the files on their own merits.

The tracks are not just drums but guitar, bass and other instruments along with sounds such as piano, strings, guitar and fret noises. Most of the basic patterns are only a bar or Sunny Side gives this track a two long but they have been copied Reggae feel.



The Electric Piano part in

וריי נול מוליי נולי מולי נולי נולי נולי נולי

It's the bass line and guitar twiddles that make this piece so interesting.

so that the length of the tracks may be 100 bars or so. There are a few instrumental riffs thrown in to break up the insistency of the rhythm.

The patterns aren't the classic Rap patterns we discussed last month and the drum lines are more rock oriented than Rap. But you want something a bit different, don't you? The main interest comes from the instrumental additions, some of which pay lip service to Techno and Ambient. A couple, Riftriff and Sunny Side, even have a smattering of

Reggae, But I like them. Take a wider view of Rap and I think you'll like them, too.

ST REVIEW COMMENT: "An interesting collection of alternative Rap patterns. Well worth checking

0000

Hit Shot contains 30 tracks and is billed as the Ultimate Dance Music Construction Disk. Most of the An exceptionally busy synth line pieces include not just drums but from Hit Shots. This one's in C! percussion, piano, bass lines, guitar riffs, synths and so on.



There are some terrific grooves here, excellent stuff, particularly in the bass line department. There are also some obvious "quotes" from artists such as 2 Unlimited.

As with all HM files, if you want to use these commercially you need to negotiate a separate license agreement. Finally, it's a little sad to see the price of building block disks hitting, and going over, the £20 mark which many

potential buyers may think is a touch too much. Readers comments are welcome...

ST REVIEW COMMENT: "A great collection for anyone into Dance. It's only the price that loses it a star."

0000

Recognise this Hit Shot bass line? It has Unlimited potential...



TWIDDLY • BITS VOLUME 3

Keyfax Software • £21.95 • 0491 579645

It's amazing what you can do with a MIDI guitar! We looked at the first two disks in the twiddly bits collection in our August column. Now volume 3 is here full of quitar licks, riffs and grooves along with bends, picks, strums, chords, slides, trills and flurries, too! In fact, every sort of guitar twiddle you can think of.

There are hundreds of patterns here. Many are quite short, the sort of thing you'd drop into an intro, ending or a solo but there are also patterns that are several bars long which you could use in the rhythm section of a song. There are funk, jazz and rock riffs, finger pick lines, banjo bits and a superb set of Latin riffs.

The patterns are saved as individual MIDI files and also as a Cubase Arrangement - ideal for auditioning purposes. To use the patterns, simply copy them to the required place in a song and transpose them to the correct key. It's best if you have a patternwant them to go.

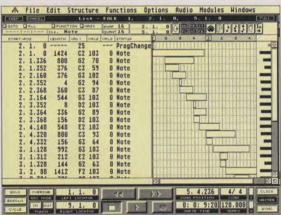
The printed documentation in sight!



Not a Schoenberg score but the Cubase Arrangement of twiddly bits volume 3 showing all the categories.



based sequencer as you can see One of the guitar strums as it to drag the riffs exactly where you appears in Cubase's Key Editor and not a quantise function



One of twiddly ·bits' complex guitar riffs in Cubase's Key Editor.

gives you exact information about the pattern lengths and start positions and tells you exactly what the patterns are. The printing is rather small, as it is with the other TB volumes, but it does fit rather neatly into the disk case. In any event, few disks such as this include printed documentation.

This is an amazing collection. When you listen to some of the patterns, it is impossible to believe that they are coming from a General MIDI sound module and not a live guitarist. All the subtleties of timing and expression

The files work not because they have been cleverly programmed but because they have been expertly played. You can see this if you examine them in an event editor. Some of the pieces may have been tweaked a bit but the data was put there by professional musicians. In fact, one of twiddly•bits' claims to fame is that they were recorded by "name" musos such as Steve Hackett and Milton MacDonald - and you don't need a separate license agreement in order to use these patterns in commercial recordings...

ST REVIEW COMMENT: "An incredible collection of guitar riffs which I can't recommend too highly. Buy it." 00000

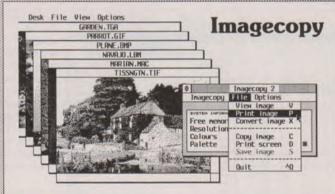
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☐ Imagecopy 2 £19.95 There is no better way to grab, view, convert and print images on your ST or Falcon. Supports 9pin and 24-pin Epson compatibles, Cannon BJ, HP DeskJet and Laserjet mono and colour printers. Many more features - write or phone for

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- Obsession preview
- H.E.R.O. preview
- Zero-5 preview
- Games Galore football round-up
- PD Action five reviews
- Feature on Unique
 Development, creators
 of Obsession







The Story So Far

- brief reviews of
Cybermorph, Raiden
Dino Dudes,
Crescent Galaxy,
and Tempest 2000

- Brutal Sports
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Unique Development Sweden

A relatively new software company from Sweden is about to take the ST games scene by storm. We take a a look at who, where, when and why...

he person who claimed that it's quality not quantity that matters certainly had a point where the current ST games market is concerned. While there aren't many new games appearing, the ones to emerge are of an exceptionally high quality.

Just such a game is Obsession, a pinballer from Unique Development Sweden. Those who attended the recent Atari shows in Bristol and London will have been lucky enough to get a sneak preview of the game that looks set to blow away any exposition.

We recently had the opportunity to talk to the guys behind *Obsession* and take a sneak preview of what this new game has to offer.



Aquatic Adventure's graphics include nice touches such as Poseidon behind the bumpers and the odd submarine letting off a salvo!

WHY THE STE?

Unique Development Sweden was created in 1992 when Michael Brunnström and Peter Zetterberg met and started writing games for the STe. But what made them write a

pinball game? Peter explains: "There are a lot of pinball games available for the Amiga, SNES, Sega, PC and Acorn machines. But no one has done a good one for the Atari except

for Starball. We decided on a "no compromise" game and a pinball game was the natural thing to write.

"Peter and I had discussed making a game that really used the features in the Atari STe like blitter, hardware scrolling and the stereo soundchip. A pinball game seemed the perfect game to start with and *Obsession* was born." adds Michael.

It's easy enough to come up with an idea but what's the process for carrying out such an ambitious project? Graphic artist Jimmy Gustavsson reveals: "During development the table is drawn in several layers. For example, layer 1 is the background, layer 2 is the shape of the pinball table and so on. If we worked with only one layer containing all the details, a small change to the table layout would force me to redraw, maybe, the entire picture."

As well as spectacular graphics, the music promises to be something rather special. From the sample we've heard it's obvious that a great deal of attention has been paid to it. "When I put together the music, Peter gave me the general guidelines for the mood of the pinball table," points out Per Almered, the musician for the project. "For X-ile Zone, for instance, he told me he wanted the entire table to reflect an 'after the war' scenario, a sort of cold, hard, atmosphere. I wrote the music using a program called Octalyser, an 8-channel STe tracker. All the instruments are sampled by myself, from Sample CDs and different synths.

Peter boasts that: "The STe only has two channels of sound, but thanks to some amazing programming from Tord Jansson, we're playing a total of five channels at 25kHz, four of which are used for the

STEP BY STEP GUIDE

WORKING IN LAYERS

To save having to redesign the entire table each time a minor change is required, Unique's graphic artist Jimmy Gustavsson works in layers...



Layer 1: the background from the X-ile Zone pinball table has a neat colour blend from purple to pink – and a rather exotic silhouette of the Empire State building!



Layer 3: here we have the transportation bridges and small ramps that change the speed of the ball. Again, any minor directional changes can be easily handled from here.



Layer 2: on top of this goes the walls and bumpers, with interesting brass, chrome and glass tones. Any alterations to letters or bumper positions can be easily carried out.



All Layers: masking out the backgrounds from layers two and three respectively, the three layers are placed on top of one another in order, linking together perfectly.



WIZARDS

MEET THE TEAM



The team: (from the left, standing) Tord Jansson, coder – wrote the replay routine and game menu; Magnus Zetterburg; Per Almered – designer and musician; Hans Härröd – handled screen and keyboard code; Michael Brunnström – game designer and main programmer. (Sitting) Peter Zetterberg – game designer and project co-ordinator.



Desert is probably the most impressive of the three current boards courtesy of the stunning rally cars and additional transportation bridges...

background music, and one that is dedicated for sound effects such as bumper bounces."

TAKING CHARGE

But it couldn't have been an easy task to create the game and Peter readily admits this: "As a project co-ordinator you find yourself always solving problems. I love it, because for me a problem is purely an opportunity, a chance to make the best out of a tough situation. Doing a game is like making a movie – and I am the director." Kalle Lundqvist, who coded the ball routine, isn't quite as philosophical: "I expected it to be fairly easy once you had figured out the relatively simple maths behind the bounces. After a few weeks of hard

work, I realised how wrong I was - no matter how you made the routine, the damn ball always seemed to get stuck somewhere! The only solution was to try to detect when the ball was stuck and then release it from its digital bonds. Writing a ball routine is a whole lot of hard work it has taken me a year so far - and I wouldn't recommend it to anyone that isn't immensely stubborn or half insane!" For Unique Developments though, gameplay remained uppermost in their considerations. Peter explains: "Gameplay is the only factor that matters really! When you look at the technical specifications for Obsession such as 336 by 265 pixel resolution, lots of colours, 5-channel DMA sound, 50Hz screen update and so on, it's understandable to wonder

'is there a game too?'. The nice thing is that there is! If, for instance, the music routines would take so much processing time that the gameplay would suffer, we wouldn't hesitate for a minute to throw them right out the door! Nothing can make up for bad gameplay, and Obsession was designed to be not only addictive, but totally obsessive!"

THE FUTURE

Apart from *Obsession*, what else can we expect to see from the team in the not so distant future?

Developments are underway for

another 1Mb STe game called SubStation, a 3-D futuristic shoot-'em-up that promises to take the STe to its very limits!

Details are quite sketchy at the moment but the team has revealed that a new sound system for the STe is being developed just for the game – DDAUDIO, the two D's being for Distance and Direction. Apparently we are "DOOMed to love it!" and "if you use a really good stereo system when playing SubStation, you'll never wanna be home alone..."

And if what we've seen from Obsession is anything to go buy - we can't wait!

OBSESSION PREVIEW

FIRST IMPRESSIONS

So just how good is Obsession? We couldn't keep Jane Plessey away from it...

Five million points and still going strong – I'll stop in another five minutes to write this preview. I'm playing on the *X-ile Zone* board with the "S", "K", and "U" lit and a "x3" flag active. Now if only I could get the ball to run around the top for that extra million...

If you're a pinball freak like me, then the last thing you'll want to do is write about *Obsession* once you get your hands on it. The pre-release version is just awesome in all respects. The graphics are stunning – with all credit going to Unique's 18-year-old designer, Jimmy Gustavsson – and the 25kHz sound replay is superb with four channels of ace background music and some great bumper effects.

You can see why the team opted to make this an STe-only game. As the board takes up two ST screens, one vertically above the other, the scrolling

has to be absolutely right otherwise the screen movement would detract from the game.

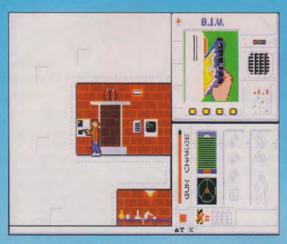
Additionally, a screen refresh rate of 50Hz means that there is no discernible flicker – your eyes can focus clearly on the ball while your mind has the awful task of having to concentrate on the ball position and flippers while admiring the incredible graphics! And if you think our screenshots have more than 16 colours, you're right – because some clever coding and palette switching ensures that there are over 32 colours on screen in standard ST low resolution mode.

The final release version should also have a nudge facility that will take the gameplay onto another planet! Oh damn – that bloody skull has gobbled up my ball again. Excuse me while I get back to more important work – like another try at this game...



Impressive graphics and equally awesome gameplay will make Obsession very difficult to put down...

Make sure vou don't forget to recharge your gun...





Don't touch the robots - vou die instantly!

8.I.V.

FIRST IMPRESSIONS

With one or two independent software houses entering the market of late, one of them, IDS, has a new arcade adventure. Tina Hackett thinks she's found her hero...

any high quality games are being released at present by independent companies. H.E.R.O. from IDS looks to be just one of these titles and will be coming to an ST near you very soon! Promising to be a cross between Flashback and Prince of Persia, H.E.R.O. (Human Extraction & Rescue Operation) looks to be a fun arcade/adventure game.

You play the all-round good guy who is trying to save the human race from destruction, not an easy task as you might expect. The story goes that in some hi-tech complex, a computer system has gone mad (/ never did trust 'em... Ed) and has decided that all human life forms pose a health risk.

People have been trapped in this complex and as it's set in the middle of a Nuclear Winter, there's every chance that these are the last of mankind. Yes, I know it sounds ever so slightly contrived but that's roughly the plot.



Negotiate the spikes to reach the other side.



KILLING MACHINE

It's here that you come in - Mr. Fred Superguy; electrician, plumber and part-time superhero. Armed with only a laser gun and your wits, you must locate the humans and then guide them to a teleport machine. Well, to be precise, the exact description of your objective is the "extraction of live humans from enemy positions. To seek, eliminate and destroy enemy within a limited time and inflict maximum damage to enemy strongholds". I'm sure you

Unfortunately, all sorts of obstacles block your path from puddles of toxic green ooze to manic, deranged robots. And this is where the nice touches come in because depending on how you die (and inevitably you will) you get a different effect. Like if you walk into a laser beam you get burnt to a crisp and the green slime turns you into a skeleton on the

TRIVIAL PURSUITS

The actual character himself makes the game that bit different from the norm. He has been well animated and if left standing around, he mops his brow, taps his foot or takes a drink. Trivial? No! Action like this makes the game that bit more interesting.

And what about playability, the part that matters most? Well, the demo we played worked well and seems rather addictive. At the

moment though you do seem to die a bit too often but this will only help to provide lastability and make for more of a challenge. The character is equipped with plenty of moves making scaling even the highest of walls possible - and he absolutely skates across dangerous pools. The laser gun adds a shoot-'em-up element to the game as you shoot the deranged robots whenever they head for you.

Although at the moment it doesn't look to be the most graphically advanced of games, this is certainly a game that is designed to be fun rather than atmospheric! The setting looks rather like yer typical Frankenstein's lab with dangerous chemicals scattered everywhere and lots of nasties intent on getting you. It's a sort of mixture between Scooby Doo and Hammer Horror which works well in providing a fun, arcade-style game mixed with a taxing adventure.

DEATHLY QUIET

Our pre-release did not have the sound completely finished but by the time you see H.E.R.O., it should have sampled sound conveying plenty of top "death noises" and "obliterating the enemy" sounds.

The game will cost £14.99 and will run on any ST or STe with at least 1Mb of memory. The facility to save and load games will also be added, a welcome solution to the frustration of having to start from scratch each time...



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age all in one. This package allows you to take a scan and add colour to it. Useful for those of us with mono scanners.

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GAMES GALORES

Tina Hackett plays referee and takes a look at the finest football games on the ST...

ne of the most overused clichés of all time has to be "it's a funny old game", but it certainly rings true where football and computer games are concerned - it is quite a difficult feat to accomplish when you think about it. I mean, how do you realistically convey a sport that's watched and played by so many without falling foul of harsh criticism from the experts and fanatics?

It's a hard task which may explain why there have been some vastly different efforts, varying in standard from the good to the downright atrocious!

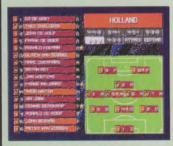
The footie genre is also a wide one covering everything from arcade kick-'em-ups to complex management sims - the differences between the many titles available are enormous. And there seems to be no set formula for what makes a good football game, many simply being down to personal preference.

For example, what is the best view of the pitch? Should it be overhead or side-on? Or sprite size - large and animated or small and quick? Even things such as whether to include a scanner all have to be carefully considered.

When looking at football games, two names immediately spring to mind: Dino Dini, the man behind the Kick Off series, and Sensible Software, the chaps behind the aptly-named Sensible Soccer! Both games have been hailed as being of a definitive nature.

There are plenty more where these have come from, but are they in the same league? We take a look at the best...

SENSIBLE SOCCER



The game allows for some serious tactical decisions!

The football games scene was a contented place. Kick Off 2 had established itself as the football game to have. And then all hell broke lose! A relatively new software developer, namely Sensible Software, brought out its new release and dubious though the public were at first, it soon shot straight to the top of many a gameplayer's collection.

And what was so different about it? Sprite size for a start. Yes, the usual mid-sized sprites were replaced by these miniature diddy men and boy do they work

caused a stir at first, but work brilliantly. well, making the game incredibly fast and highly playable. The advantage of

The small sprites certainly

this is that more of the play area is shown which enhances the playability

The game is viewed from a slightly elevated position so there's no need for a scanner or radar. There's also the novel Seasonal Weather option as well as the important feature of being able to customise the data.

Following in the footsteps of many other football games, there are the updated versions with the World Cup edition, coming complete with referee sequences and the World Cup teams.

Sensible Soccer plays like the real thing, looks great and conjures up the atmosphere brilliantly. The action is fast-paced and the two-player mode dangerously addictive. One that every games player should have!

■ Overall Rating: 83%

GOAL!

When Dino Dini parted company with Anco, it seemed that there was little chance of a third Kick Off in the series. But the license was taken up by Virgin and renamed Goal! Graphically it is rather basic to say the least and although Virgin's second attempt to rectify the bugs wasn't completely successful, it is still one of the most playable games around.

A lot of a attention has been paid to making the game realistic. For example, the game takes account of the players' "turning circle", which depends on how fast the player is travelling, and the acceleration and deceleration can be built up and slowed down gradually as would happen in the real game.

Another great feature in Goal! is the ability to switch views from the usual vertical view to a horizontal one. This makes for a totally new and original game and the ability to change views by a simple press of the <spacebar> from a close-up view to a zoomed out one works nicely too.

There are more moves available than usual and although they need a little practice, they do work brilliantly. For example, you can trap the ball and then direct your shot accurately. Set-pieces are taken by altering an arc of dots to select the direction, height and strength you wish to use.

So despite some of the bugs which really don't affect the proceedings too much, Goal! is a highly playable game.

■ Overall Rating: 80%

There are plenty of options available to alter the feel of the game.



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MANCHESTER UNITED EUROPE

Being a Manchester United fan it may come as no surprise that this is one of my favourite football games. But even if it were Manchester City Europe it would still be a brilliant game – even though Man City won't ever make it into Europe! (oooh... Ed)

The graphical style of the game is more detailed than most and works well. The sprites are realistically sized and actually look as if they are kicking the ball. Although it does play slightly slower than some of the competition, it gives you time to plan your shots. Aftertouch and the one-touch play also allow you to produce some good shots.

You get to take Manchester United into European club competitions, including the European Cup, European Cup Winners Cup and UEFA Cup among others which certainly provides lastability.

There is a four-player option (with an adaptor), player stats, tactics screen and subs screen which add variety to the game. And the nail-biting penalty shootouts in cup competitions are excellent.

Although not the paciest of sims, the game is very playable, realistic and the detailed graphics look great. It is a worth-while attempt and deserves to be in any gamer's collection.

■ Overall Rating: 79%



Yep - you get to work out tactics carefully...





The detailed graphics add to the game's feel.

Dino Dini's Kick Off games

THE BEST OF THE REST

There are many football games available and if you didn't fancy any of our main simulations, then perhaps some of the others will grab you. And if the actual playing aspect doesn't appeal, you could play the manager!

PREMIER MANAGER 1 AND 2

The excellent management sim from Gremlin has recently been improved even further with the sequel. Every aspect of the manager's job has been included from deciding matchday tactics to when to make ground improvements.

CHAMPIONSHIP MANAGER

Domark's Championship Manager is another immensely popular footie management game. There are tonnes of updated versions with the '93 edition including manager history, international transfers and reserve squads.



Championship Manager
– for those who prefer
football games of a more
cerebral nature...

PLAYER MANAGER

For those who want a combination of management tactics and a good old-fashioned *Kick Off* match then *Player Manager* provides the opportunity.

STRIKER

Rage's soccer sim proved to be a popular choice with games players who wanted a pacey kick-about.

KICK OFF AND KICK OFF 2



Now this is the classic that really set the standard way, way back. The man responsible was Dino Dini and together with publishers, Anco he changed the face of footy games as we knew them, although they now look extremely dated

The game is viewed from a top down perspective with a scanner showing all the players. And whether you are new to the game or a *Kick Off* veteran, *Kick Off* caters for all abilities with five skill levels to choose from.

The game also takes into consideration things like ground and air friction and different player attributes which may seem nothing new tod

and different player attributes which may seem nothing new today, but was certainly incredible stuff for its time!

Okay, so we're cheating a bit because we're including *Kick Off 2* but this is because they're veritable classics in their own right and both can be classed together in one section.

Kick Off 2 was a vast improvement on the original and when the data disk, Final Whistle was added, it made the best even better. Nice touches such as a referee and a physio were added, the gameplay was tweaked and the different possible moves improved considerably. A classic series.

Overall Rating: 70%



Kick Off looks quite dated now but it set a new standard when it first appeared.

BUYER'S GUIDE

YOUR CHOICE...

Still can't decide? Take a peak at our guide to the essential footie sims...

Game	Company	Contact	Price	Machine	Memory	Graphics	Sound	VFM	Playability	Overall
Sensible Soccer	Renegade	071-481 9214	£19.99	ST	0.5Mb	7	8	9	9	83%
Goal!	Virgin	081-960 2255	£25.99	ST	1Mb	6	8	9	9	80%
Kick Off	Anco	N/A	£7.99	ST	0.5Mb	6	6	8	8	70%
Manchester United	Krisalis	0709 372290	£9.99	ST	0.5Mb	8	7	9	8	79%





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Well crafted your Persius fighter has some classy weaponry!



Rocks away - Zero-5 features impressive 3-D landscapes that have to be carefully navigated.

MPRESSIONS

FLY LIKE THE WIND

ou've probably heard the name of Caspian Software courtesy of its Rock 'n' Roll Clams game from earlier this year. In many ways, this game was a toe in the water for the company, a test of the Atari games market. It's probably not unfair to say that Rock 'n' Roll Clams failed to capture the public's imagination - perhaps we've had a stomach-full of "cutesy" characters. However, the level of programming was certainly high and gave a good indication of what to expect in the future.

Well the future has arrived literally. Zero-5 is an STe/Falconspecific game that takes you forward to the middle of the twenty-first century to a time when the Earth is on the brink of galactic war with a race that is duty-bound to destroy all human life.

You take on the role of a newlyrecruited Space Hound flying a Persius craft, a highly agile fighter that can achieve a velocity faster than

NO COMPROMISE

In many respects, Caspian Software's approach to Zero-5 is similar to that of Unique Development and Obsession - extraction of every ounce of programming power from the STe and Falcon. To this end, the

Vic Lennard dons the spacesuit and flies off in search of aliens in this preview of Zero-5...



Down to Earth - there are bringing your ship to the

computer's blitter chip is used extensively for real time graphics, and additional hardware, such as certain characteristics of the Falcon's 68030 processor, is intelligently utilised. Caspian has even included support for the Jaguar's powerpad.

The DMA sound system is used to great effect with four channels of sampled sound; Dave Newman's music on the pre-release is excellent both in terms of composition and 25kHz play-back quality.

For computers with more than 1Mb of RAM, digitised speech is also included - and very good it is too, being far more than the usual speech synthesisers that we have been used to previously.



INTO THE GAME

The game starts by taking you through four flashbacks from John Kennedy to the first moon landing, ending with the enigmatic question: "Is anybody out there?". The answer as far as Zero-5 is concerned is an emphatic "yes", and a click on the main screen's "Biblios" box unfolds the entire story from the launch of the first deep-space probe to the interception of a message from a race called the Morphons which drives home the stark reality that we are about to be invaded!

Such attention to detail continues throughout the whole game. A click on the "Enemy Data" main screen box gives you precise information on every enemy ship, including a shaded, vector-drawn representation of each of them.

Once you've enrolled as a pilot through the "Status" box, you get the opportunity to go out and fight, "Execute Mission" then takes you skyward for your first mission, Baptism: The First Encounter where you do indeed get the opportunity to kick some butt. At this point, the

decision to restrict Zero-5 to a machine with hardware scrolling and a blitter chip really pays off. The scrolling is quite superb and the speed of enemy craft movement really takes your breath away. That this is an out-and-out shoot-'em-up is not in question, especially as you don't get the option to slow down or reverse - it's one speed and shoot, shoot, shoot. That said, a number of preset sequences are included, such as leaving the spacestation and flying to the Earth's surface.

The first mission is fairly straightforward but the next one has you flying down to the Earth's surface to sweep up an enemy attack. Here you find a mixture of bitmapped graphics for the planet surface along with vector polygons for the spacecrafts, mountains and the like.

On release, the game will come packaged with two or three missions; further offerings will be available through extra mission disks. You'll even be able to have a photo of yourself scanned through a special service that Caspian will be offering so that a picture of you appears alongside your pilot details - neat!

IMPRESSIVE

There is little doubt that Zero-5 has the potential to be the ultimate shoot-'em-up. With over four megabytes of code and digitised sound, the game is likely to be provided on five floppies which, for a price of £24.99, represents one hell of a programming achievement for an Atari computer game. Caspian are going out on a limb with Zero-5, bucking the trend when almost all major software houses are turning their backs on the ST. Let's just hope that you're prepared to put your money where Caspian's mouth is...

Big bang - get close to the enemy's mother ship and blast it!

PD ACTION

Piggy Bank got the hunger pangs? Wallet looking anorexic? Fear not as Tina Hackett brings you a selection of currently available PD and shareware games...



Health not too good? Then shoot the First Aid crates...

COMBAT

FROM AUTHOR • £5.00 • SHAREWARE • MEMORY: 0.5MB • FALCON-COMPATIBLE (WITH BACKWARD)

IN BRIEF: Shoot-'em-up mayhem can be yours with *Combat*, a simple, "shoot everything in sight for world peace", sort of game. And while it's not exactly politically correct, it's fun!

You have a mission – to protect the world's oil supply which is under threat from a missile site. And rather than join a Greenpeace organisation, you nip down to the desert armed with your machine gun to right the wrongs and be an all-round good guy.

Wearing your new Chobham Armour Combat Suit (which is not only fashionable but practical too) and proudly bearing your 10mm automatic rifle, deluxe edition with integrated grenade launcher, you set out on your mission.

Millions of bad guys, armed with equally advanced weaponry, try to block your path but luckily your suit protects you from most hits. Helicopters fly overhead like a scene from Wings of the Apache – but one blast from your automatic sends them plunging to the ground faster than a whippet on speed!

Watch the agonised expressions of the enemy as they clutch their fresh bullet wounds. Yes, it's very much a case of kill or be killed, and if your health bar reaches the end then it's the end of the line for you, matey!

Getting slightly carried away here – it's only a game! So how's it played you may ask? Combat, being very similar to Operation Wolf, uses a simple control system: direct the crosshair onto the target and press the left mouse button for bullets, the right for grenades. And there you go – all the fun of playing a muscle-bound hero at the touch of a mouse button! Obtainable through a cheque or postal order from Mr. A. Briggs, 33 Crina Walk, Basildon, Essex SS14 1SW.

ST REVIEW COMMENT: "Okay, so it doesn't rate very highly in the originality stakes but it is *very* playable. The first person perspective fits in well with the action, turning you into a homicidal maniac in no time flat!

"The graphics look good and the expressions on the sprite's faces add humour. Sound effects are scarce, using only that of the gun fire, and more variety would have benefited the game. All in all though, a fun title."

Helicopters pose a danger from above – blast 'em!



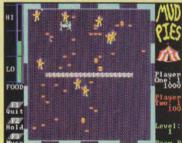
MUDPIES

FLOPPYSHOP • DISK NO.: GAM.4423C • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE (WITH BACKWARD)

IN BRIEF: Forget fancy graphics – playability is what counts! And *Mudpies* has it in abundance. Way back in 1985, this was released by Michtron and although it now looks ancient, it's still great fun to play.

The concept of the world's first splat-'em-up (a what? Ed) is simple. You are a stick man sprite running through a series of rooms by finding your way through the gaps at the edge of the screen. But unfortunately your way is trapped by a gaggle of clowns. The screen is full of 'em and the only method of elimination you have at your disposal is mud pies which, in true comic style, you splat them with. Pies can be thrown up, down and diagonally to hit the desired target.

You also have to negotiate the food left around the screens to boost your food meter. Yes, you have to pick up as much milk, McDonald chips and hamburgers as you can find without risking life and limb getting hit by the clowns and the skittles they jug-



Hurrah – here come the Ambulance men!



Collect the food to boost your health meter.

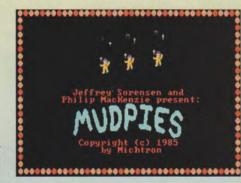
gle. And if you do get hit (and this is the good bit!) two nice St John's Ambulance-type men walk on and stretcher you off.

The game is controlled by mouse or joystick and can be played by one or two players taking turns – racing to get more points than your opponent adds to the fun.

ST REVIEW COMMENT: "The graphics are quite laughable – in fact, when I first loaded the game up I was smirking away with my usual reviewer's cynicism, but I don't mind admitting that I started to get rather addicted to the game. It's definitely one of those titles that leaves you thinking that with one more go you'd crack it.

"The jaunty little tune, however corny, fits in nicely and the sound effects, like when a pie hits the clown, work well. A simple concept crammed full of playability."

Despite being an oldie, this sure is a goldie...





Sherlock Hounds (geddit?) guides you through the game ...

SPOT IT

FLOPPYSHOP • DISK NO.: GAM 4295C • £2.00 • MEMORY: 0.5MB . PUBLIC DOMAIN . FALCON-COMPATIBLE

IN BRIEF: Prepare to be whisked back to your childhood with the classic old game of Spot The Difference. Yes, this age-old child's game finds its way onto the computer.

And a good idea it seems to be at first. The computer tells you whether you are right or wrong and generates many new pictures, with the differences changing to add lastability. Sherlock the dog (yes, honestly!) is your guide and he tells you how many differences you have found and how many are left.

When you find a difference, you click on it and a cross appears to mark it. Each game gives you ten differences to find and believe me, it's a lot harder than it sounds! You can't just guess because once you get five wrong, the

There are eleven pictures in all to choose from and all are in a colourful and cartoony style. The selection of pictures is probably aimed at a youngish audience which worries me a little because many of the actual differences are likely to be too subtle for a child to pick up on...

ST REVIEW COMMENT: "The idea is a good one but perhaps because the audience isn't clearly defined, it's hard to recommend it. The puzzles are too hard for children but the pictures too cartoony for adults. Another frustrating part is that if you do give up then the computer doesn't show you where the differences are - unless, of course, you can discover the cheat that reveals them!"



The cartoony-style pics seem to be aimed at children.

BATSUB

FLOPPYSHOP . DISK NO .: GAM 4424C . £2.00 . MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE (WITH BACKWARD)

IN BRIEF: We get our fair share of rather basic games in the PD offerings that we get and while some of these can be very successful, once in a while we get something so dreadfully basic that it defies belief!

You are in a submarine and the idea is to launch torpedoes at the ships sailing above you. Different ships warrant a different number of points. While doing this though, you have to avoid the fish and crates of explosives that litter the ocean - but since when has something the size of a fish damaged a submarine?

Before you play a game you usually read the instructions, right? Wrong! You're expected to read the instructions as they scroll past while you're playing the game! Deep joy - not...

ST REVIEW COMMENT: "The actual idea for the game is not a bad one but how it has been carried out is dreadful! The graphics are all in blue making it difficult to even see the boats, and the controls are totally unresponsive. The sound effects aren't much better either, using a feeble exploding noise. Playing it for more than a minute results in frustration and, most of all, boredom!"



Ves. very useful these instructions...

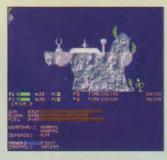


This is as exciting as it gets, I'm afraid.

UTOPOS

MERLIN PD • DISK NO.: MPD1862 • £1.25 • MEMORY: 1MB • PUBLIC DOMAIN • STE ONLY

IN BRIEF: Action in space is the setting for Utopos, a two player blast-'em-up. Because the game contains a gravity element it requires a lot of skill and joystick dexterity rather than just the usual requirement of this type of game, namely to blast the living daylights out of your opponent. The screen is split into two parts and you have to guide your spaceship around the obstacles created by the background and against the force of gravity. Once you locate your opponent, it's time to blast him to pieces! While you're at your base you can rocks that float past you.



Negotiate the dangerous

change your weaponry, re-arm and re-fuel. The base also provides a good defence if your opponent tracks you down, as you can take control of your base's gun tower and then fire at the enemy.

ST REVIEW COMMENT:

"Utopos looks great with nice detailed graphics that create the space setting well. The sound effects are big, loud explosions that enhance the blast'-em-up action brilliantly and the intro tune fits in with the mood.

"But it's just too hard to play! It's definitely a challenge to say the least but if you like to pit your skills against tough gravity games then

Choose your weapons back at the base.

go for it. Otherwise it may prove just too frustrating!"

So you want to know about the existing Jaguar Games? Then read on...

EVOLUTION: DINO DUDES

If your fingers are still trembling from a heavy *Tempest 2000* session, *Dino Dudes* is just the game to calm your nerves. It places you in charge of a tribe of mankind's earliest ancestors and the idea is to guide them on a voyage of discovery through eighty levels of brain-teasing action.

Each stage has a certain objective – it might be to discover a new tool, or to release a captive tribesman.

New objects are introduced gradually and always have more than one use; for example, a spear can be used to kill predators or to leap canyons. Although the basic theme of the game is similar through-



The goal changes for each level as the Dudes discover new objects and skills.

out, the new objects means it remains both challenging and entertaining. Good spot effects are used to lighten up the proceedings and right from the title screen through to

the password system, the presentation is polished until it positively shines.

Dino Dudes doesn't have the same wide-ranging appeal as Lemmings, but it's still a very enjoyable game in a strategical type of way. The graphics are laden with humorous touches and the music is second only to Tempest 2000 in terms of quality.



backed up by solid gameplay and enough levels to keep you going for

some time to come!



THE STORY SO



TEMPEST 2000

Tempest 2000 is a remake of the classic coin-op that set arcades on fire in the early eighties. In common with all of its contemporaries, the gameplay is extremely simple – move your craft around the rim of a 3-D web, blasting the baddies before they get a chance to climb to the top. Essentially, four games are included on the one cartridge. Traditional Tempest is an exact duplication of the arcade original, while Tempest Plus adds a few extras, and the "dual" option allows head-to-head play if you've got a spare controller.

Full-blown *Tempest 2000* is the star of the show though. The plain vectorgraphic web is thrown out of the window as a colourful shaded alternative slips into its place. New enemies are added, including deadly demon-heads and mirrors that throw fire directly back into your face. A super-zapper that destroys everything on the web is also added, but you only get one shot per level!

Huge messages explode out of the screen as bonuses are collected, while spot sound effects chip-in with encouragement. Amass enough points to gain an extra life and the whole web sparkles – it really is quite mesmerising! The music itself is made up of several dance tunes that complement the intensity of the game perfectly and numerous different star formations swirl behind each level.

Battle your way through the mayhem for a number of webs and suddenly there's silence – you're in one of the bonus levels. Three of these sub-games are available and each is slightly trickier than the last – get out of any one alive and you skip five levels, while chocking up your score considerably.

A key system is used to let you restart within two levels of the last web completed. There are a hundred webs in all and if you manage to complete the game, a new option is added – "beastly" mode. This features more intelligent baddies and is generally a whole lot more difficult, as hard as that is to imagine!

Tempest 2000 is a total assault on the senses and it will drive nostalgic coin-op fans wild. The awesome music and explosive graphics add up to one of the best arcade games you can play at home. Jaguar owners owe it to themselves to buy this game!





CRESCENT GALAXY

The question that instantly springs to mind when you see *Crescent Galaxy* is, "can a game that looks that good really be anything less than perfect?" Unfortunately, the answer is a resounding "yes", with brightly coloured, star-spangled brass knobs on.

Basically, it's nothing more than a bog-standard, horizontally-scrolling shoot-'em-up – yep, it's you against the whole universe again. The trouble is that you start your mission with a weapon barely more powerful than a pea-shooter – we're talking microscopic here. Needless to say, power-ups can be collected to improve the situation, but just one tiny mistake is enough to rob you of the extra fire-power. To add insult to injury, the music sounds like an experiment involving monkeys and a xylophone.

At the end of each level you are faced with a huge guardian and this is the best part of the game. To look at it objectively (it's a dirty job but... Ed) Crescent Galaxy has the basis of a good game. The graphics are superb and even the sound effects are decent, but deep down you can't help feeling that this is an outing with a whole lot less playability than ST classics like Xenon 2 or R-Type.



The graphics are stunning, but Crescent Galaxy hasn't got enough playability to back them up.

Special weapons are needed to stand any chance against the end-of -level guardians!



FAR



CYBERMORPH

Cybermorph is very difficult to button-hole. In many ways it has all of the action of an arcade game and yet play a little longer and you will find strategy elements and just a twist of flight simulation. The basic aim of the game is to fly your T-Griffon ship around numerous planet surfaces, collecting pods in order to defeat the mighty Pernitian empire.

Each surreal world is represented through gouraud-shaded scenery and despite the sheer scale of the graphics, the game maintains a swift, smooth pace. A small navigational computer sits in the top right-hand corner of the screen and provides directions to the nearest pod. As the game progresses, force fields are introduced and you need to find the generation point before you can rescue the pods.

The game is split into five sectors, each containing eight planets. Codes are handed out at the end of each sector, but an end-of-level guardian must be dealt with first. Atari has done remarkably well in getting a game as good as *Cybermorph* packaged with the Jaguar. It's not as technically impressive as some of the forthcoming titles, but the gameplay is superb.



The scenery is vast and the Jaguar throws the lot around effortlessly – roll on Battlemorph!

Select one of eight destinations and face the challenge.



Scattered liberally around each planet are yellow pods - collect 'em and you're done!





RAIDEN

No console is complete without a quality shoot-'em-up and *Raiden* is almost good enough to erase any thoughts of *Crescent Galaxy* from your mind. As usual, the plot is wafer-thin and involves taking command of a space-fighter to rid the earth of some strangely nameless aliens.

Power-ups fill the air as wave after wave of aliens bite the dust, and bombs can be used to take out ground installations. As you'd expect from a machine of the Jag's calibre, the scrolling is blissfully smooth and the graphics nicely detailed, although the less said about the huge information panel the better! The sound effects aren't bad either, but you'll be sorely disappointed if you are expecting anything vaguely original, in terms of



It's amazing what chaos a few dropped bombs can cause...

presentation or playability. Hardened shoot-'em-up freaks might also find the whole thing a little too easy – completing the game isn't all that difficult and there's little reason for wanting to run through it a second time.

If you're desperate for a thoroughbred Jag shoot-'em-up, Raiden will suffice. It's arcadeperfect as far as the graphics are concerned, but don't expect too much long term playability...

ST Review would like to extend its thanks to:

Daniel Department 120-5 Peascod St. Windsor Berks SL4 1DP (0753 862106)

... for the kind loan of all games in Jagged Edge.



JAGGED EDGE NEWS

COSMIC PREMIERE!

The Jaguar Première in London signalled the start of Atari's assault on the console market. Nial Grimes went in search of models in cat suits...

Planetarium was host to the official première of the Jaguar in this country. Atari pulled out all the stops to woo journalists and to prove that the Jag is going to be the console sensation of Christmas 1994.

Music from Jeff Minter's Tempest 2000 CD filled the air as visitors soaked up the atmosphere and drank washing-up liquid (just one of the printable descriptions of this green potion's actual flavour). Having spent an hour circulating among camera crews from MTV and Newsround, the crowd was ushered up into the dome...

ALIEN INVASION

Colonial Marines taken directly from Aliens (hey – what happened to the models from the US launch? Ed) hustled delegates to their seats with



Jaguar arcade cabinets were scattered around the Planetarium, but the big attraction was AvP in the dome itself.

the obligatory "Move it, move it, move it!" and a presentation was projected onto the ceiling of the Planetarium.

A comprehensive line-up of forthcoming games was the main attraction, with titles like *Chequered Flag, Club Drive* and *Iron Soldier* looking extremely promising. *Doom* was also on show; the graphics looked superb in true colour and moved very smoothly.

As for the "cutesy" side of things, both Bubsy and Rayman are obviously well on the way to release. The latter looks every bit as good as similar platform games from the Japanese giants and the animation is simply stunning. Some of the titles on show were obviously ports from other consoles, but there was a good proportion of games that were only possible thanks to the Jaguar's processing power.

But the main attraction was Alien vs Predator – a Jaguar showcase featuring some of the best texture-mapped graphics you have ever seen. October 20th is AvP day and the other titles under Atari's banner will be rolled out at a rate of one per week from that time onwards. Plenty of third-party software titles are also stacking up for a Christmas release – Kick Off 3, Flashback and Zool to name but three.

Atari's previous attempts at TV advertising have been something of a disappointment, but that's about to change. The complete armoury of Jaguar commercials followed on from

\$1000 \$15000 \$15000 \$15000

Bubsy (left) and Rayman have the cutesy side of the market well covered...



the game previews and it's nice to see that Atari has come up with an assortment of adverts to suit different age groups. Admittedly, some were a little bit corny, but even the sceptics were forced to cheer as the Alien vs Predator advert was shown. Picture the scene: a teenager sits in a darkened room playing AvP. Suddenly, he feels a touch on his shoulder and quickly turns to see his mother's hand; relief! The camera then pans back to reveal the Alien moving the mother's arm with its claws, puppet-style!

GAME FOR A LAUGH

Naturally, some completed games also put in an appearance. With the presentation out of the way, the video screens around the reception lounge switched to a running demo of *Alien vs Predator* and in the auditorium itself, visitors were allowed to put the game through its paces. Although the cartridges were "bare", *AvP* is fully completed and has reached the manufacturing stage

in the States. Doubts have been expressed over the gameplay, but these certainly seem to be unfounded – add the atmosphere of the *Aliens* films to the graphical quality of *Doom* and you'll have some idea of how impressive this game is.

Taking a secondary place was Katsumi Ninja, a beat-'em-up from the Mortal Kombat school. This was the only other completed game at the Première and celebrity challenges were run throughout the evening. Rumours that Atari marketing manager Darryl Still features as a character in Ninja were fiercely denied, but some of the evasive tactics seemed far too familiar to the journalists in attendance.

The evening was enjoyed by all present, and it finally proved that Atari means business when it comes to marketing the Jaguar in this country. Some of the forthcoming titles can only be described as "red-hot" and with the right adverts running regularly throughout the run up to Christmas, it's odds on for a Jaguar invasion!

The Colonial Marines were only too pleased to demonstrate their skills with the help of Wolfenstein!



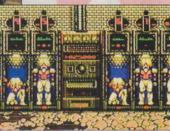


Speedball meets Street Fighter in the very first Jag sports sim, Brutal Sports Football. Nial Grimes dons the body armour and prays for rain to call off play...

he year is 2034 and traditional sports can no longer satisfy the demands of thrill-hungry audiences. The Brutal League is devised as a solution - a game with no rules, played by genetically engineered creatures with more muscles than a gorilla on steroids. Referees are a thing of the past and the aim of the game is simply to win, no matter what the cost.

Brutal Sports is fought over a 200-yard pitch and to score you need only get the ball to the stone goal at the opposite end of the field. Players have four basic moves at their disposal - tackle, pass, punch and

health in the locker room you'll need plenty of cash to heal the more serious cases! Simple knockout and "unfriendly" games are available in addition to league play.



LET'S GET BRUTAL

FACTS 'N' FIGURES

Product: **Brutal Sports Football**

> Price: £59.99

Players:

1 or 2

Graphics: 0000000000

Sound: 0000000000

VFM: 000000000

Playability: 0000000000

> OVERALL 84%

kick - and automatically pick up the ball whenever they pass over it. Tackles are of the flying variety and the game is very lenient in allowing you to attack another player from

almost any angle.

Just to spice up the action even further, power-ups appear on the field from time to time. Run over a rabbit and your player receives a boost in speed, while shields help out in fending off tackles and attacks from other players. Up to three special-power icons can be carried by any player, although in reality it's hard enough to just keep the ball in the right end of the field without worrying about fireballs and the like.

There are two ways to win a game: score more goals than the other team or put six of their players out of commission!

When each game is completed, the whole team is transported to the locker room. Here, in the regeneration tubes, your players can be nursed back to health and have any missing limbs re-attached. All of these services cost money, so a win is

BRUTAL RULES

Over and above basic "unfriendly" matches, league and knockout games are also available. Naturally, your players' species is one of the least powerful and in order to win the league, you have to take on the lizards, wild goats and all-conquering rhinos. A password system allows old games to be restarted so you don't have to worry about battling through the lot in one session. Mind you, the codes are so long it's sometimes quicker to play the thing through



He bursts into tears as vet another match is lost - yes, there's a touch of humour in amongst the mayhem.



Shields and other power-ups can be grabbed by any player and used against the other

again! If you are used to buying ST games, Brutal Sport's presentation will blow you away. The graphics are beautifully defined and the enthusiastic roars of approval from the crowd and almighty thuds as mutants go crashing into each other just add to the atmosphere. The background music is a little less inspiring and the players could also do with a few more frames of animation, but neither detract from the gameplay

Of course, the presentation wouldn't mean a single thing if the control system wasn't up to scratch, and thankfully this is probably the very best aspect of the game. The collision detection shows no sign of favouritism and the scrolling never hinders the speed of play. As with all truly great sports sims, two-player games are possible if you've got the extra controller.

VERDICT

Brutal Sports is incredibly satisfying to play - you can almost feel the force of each tackle and there are no pointless rules to worry about. It's quite violent, but in a cartoony sort of way and there's plenty of humour thrown in too; just watch the opposing team burst into tears as they lose! There's little doubt that the Jag will see more technically impressive games, but in the playability stakes, Brutal Sports reigns supreme!

SUMMARY

GOOD POINTS:

Slick presentation Tremendously playable

BAD POINTS:

Power-ups are awkward to use Uninspiring music

FINAL WORD:

"Brutal sports is a quality simulation – it plays like a dream and is the best two-player Jaguar game so far.

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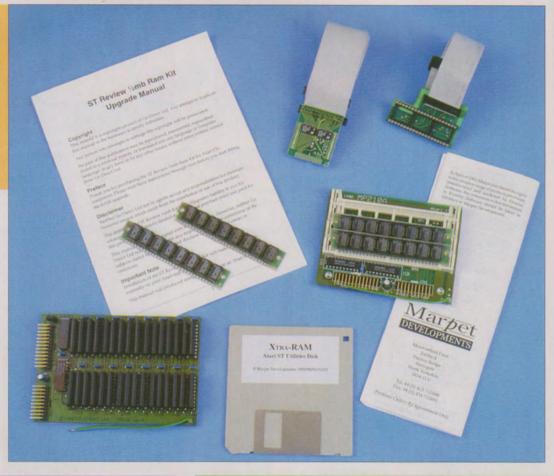
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UPGRADING AN STE

A 520 STe is usually supplied with two 256K SIMMs and has sockets to plug in two more – it's that easy! A few do not have sockets, in which case you will need a pair of adaptors. These may need soldering; if this is the case, we will supply the sockets at no extra cost – that's service!

A 1040 STe will usually have four 256K SIMMs. In order to upgrade you need to replace these to give either 2 or 4 megabytes of memory.

UPGRADING AN STFM

In over 90% of all STFMs the upgrade plugs straight in. There are possible problems if either the video shifter chip or the MMU chip in your computer are not in sockets.

4MB STFM

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Atari ST Review continues its campaign to get every ST owner to upgrade the memory of their machine to at least 1Mb and to have all those useful utilities – at the right prices!

ST UPGRADE

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LEADING BY EXAMPLE...

One question I am often asked is: how do you select the items for the Readers' Offers pages? Admittedly this usually comes from distributors who want to place their wares in ST Review, but my answer is a very honest one – personal use! Turn over the page and you'll see six items. With the exception of our custom binders, I have purchased each of the other items at some



point over the past seven years. The mouse/joystick extensions and 280dpi mouse both came from computer shows while UVK, the cartridge clock and trackball were all bought after reviews – contrary to public opinion, reviewers are very rarely allowed to keep review products.

Of these five items, three are still in regular use. UVK is used to check any disks of unknown origin for nasties while the mouse/joystick extension cable happily springs forth from my Falcon – with the trackball at the other end. The mouse is used by my six-year-old son with his ST and the only casualty has been the clock cartridge. Unfortunately this was made redundant by my hard drive's battery-backed internal clock!

As for memory, I seem to recall paying over £300 for a 2.5Mb STFM upgrade from Frontier Software some years ago – and this is still in regular use inside a rather dirty 1040STFM. As technology moves forward, the price of products manufactured by old technology invariably drops; you can buy that same RAM upgrade now for just £59!

Out of the five items, one has completely changed the way I work, namely the trackball – but that's a different story that will wait until next issue...

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The ST may be a great computer but the mouse that comes with it simply is not up to scratch. The ST Review mouse is a major enhancement because it uses microswitches for the buttons, making it much lighter and easier to click. Our mouse also has a much higher resolution – 280 dots per inch which means you need far less desk space and get much finer control.

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Who sets the time each time they switch on their ST? If like many thousands of ST owners you don't, then you are missing out. Every time you save a file it gets stamped with the time and date – invaluable when you are hunting for a file. Get a clock cartridge and the time will be set automatically each time you switch on your ST.



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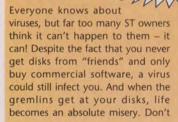


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Do you use your ST for art, graphics, DTP or music? Then you really should consider our state-of-the-art, 162 dpi trackball, as used by the editor of this magazine. Movement from one side of the screen to the other is effortless and cursor motion is rapid and smooth, far more so than with a mouse. The feel is superb thanks to the high quality micro switches under the buttons. There's also a third button that acts as a locking left button – ideal for continuous scrolling, painting or line drawing!

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PDZONE

CONTACTS

The public domain and shareware programs covered in this month's *PD Zone* were kindly supplied by the following libraries:

- Floppyshop ST, P.O. Box 273, Aberdeen, AB9 8SJ
- The ST Club, 7 Musters Road, West Bridgford, Nottingham, NG2 7PP
- Goodman International, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent, Staffs, ST3 1SW
- Merlin PD, 11 Grange Close, Minchinhampton, Stroud, Glos., GL6 9DE

TERADESK 1.4

GOODMAN INTERNATIONAL • DISK NO: BY NAME • £1.95 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE

IN BRIEF: A replacement desktop is one of the most useful utilities you can buy for your ST, but the trouble with many commercial offerings is that they consume vast amounts of memory – clearly not a good idea on a humble ST. Fortunately that's not an accusation that can be levelled at *Teradesk*; it remains the most compact desktop replacement on the market and yet offers a sound range of features.

From a new user's point of view, *Teradesk* has plenty to offer: individual icons can be assigned to programs, files are free to live on the desktop and that's saying nothing of the interface, which is just that little bit more comfortable than Atari's own offering. Good documentation is supplied and the program seems to be compatible with most fashionable utilities, including *NVDI*, *MultiTOS*, *Geneva* and many more besides.

ST REVIEW COMMENT: "Teradesk provides many of the perks of TOS 2.06 without the cost and from this point of view, it is a very good buy. If you are already using a later version of TOS, the benefits are slightly less pronounced, but it still makes a good default desktop under MultiTOS or Geneva."

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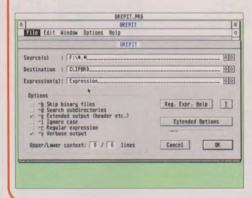
GREPIT

FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE

IN BRIEF: *Grepit* is a graphical implementation of a Unix command. At a basic level, it allows you to search through a disk looking for a particular string and will dump the results to the screen, a text file, or the GEM clipboard.

Although *Grepit* is fully mouse-controlled, you are still expected to type in search parameters, command-line style. The on-line help file is always at hand to help out with syntax, but it would have been nice to be able to choose "starts with", "contains" and so on from a pop-up menu. That said, the whole thing is very powerful and is clearly easier to use than the Unix alternative

ST REVIEW COMMENT: "Grepit is probably the most powerful search utility for the ST, full stop. However, it's also pretty complex and many of the features it offers are going to go unused by the vast majority of people. If you think you can cope with a little taste of Unix, go for it!"



Grepit is a little easier to use than its Unix counterpart, but the command-line background lingers on.

AUTOSORT 4.1

FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE

IN BRIEF: Most ST owners these days have an Auto folder packed full of utilities, system enhancements and patches. The trouble is that many of these programs need to be run from a certain position in the folder – *GDOS* and *PowerDOS* like to be early, whereas others can afford to sit at the back of the queue.

The problems arrive when you need to install something new and the whole folder must be rearranged. *Autosort* is a program that will do just that so will save you the hassle of copying dozens of files in and out of folders.

In common with earlier versions, working with *Autosort 4* is a doddle; just use the mouse to rearrange the files, click the appropriate button and within a few seconds it's all over. This version is also capable of reordering programs in other folders, although exactly where that comes in useful is a bit of a mystery.

ST REVIEW COMMENT: "Autosort is one desktop utility you just cannot afford to live without. The amount of copying and hassle it saves is unreal and in several years of use has never given me one moment of trouble – it even works reliably on the Falcon."

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Ten dollars is a small price to pay for the amount of time that Autosort saves! Rearranging a packed Auto folder couldn't be easier – just drag your files to a new position, click on "resort" and it's all over!





Hiding behind Gemini's classy interface you will find a good deal of power and a built-in command-line interpreter.



GEMINI 1.99

CIX BBS • ATARI.ST/2LISTINGS AREA • FREE • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

IN BRIEF: Gemini occupies the middle ground between Teradesk and commercial desktops such as Ease. Although superficially it offers very little more than Atari's own NewDesk, dig a little deeper and you will find a much more intuitive and classy operation, with a good deal of power to boot.

Gemini has a very gentle learning curve, because it tends to take over from where NewDesk ends, rather than completely revolutionising every principle under the sun. For instance, windows are much more intelligent and several new views have been added – things like this take no time to learn or master.

On a less practical level, custom icons can be assigned to certain programs, and colour is fully supported, screen resolution permitting. An IMG backdrop can also be installed to brighten up the desktop and *Gemini* is intelligent enough to preserve the colours used in the icons. A recoverable trashcan is always present alongside the "shredder" (total destruction) and the GEM clipboard is fully supported for copying filenames and the like. You can even use *GDOS* fonts within windows and if you had to use one word to sum up *Gemini* it would definitely be "elegant".

Gemini's secret weapon is Mupfel, a window-based command-line interface. It takes over from its host in providing access to complex copy operations and all of the usual features you would expect from a good shell. In this regard, the program is rather specialised, but you'll be surprised how handy a CLI can be at times. The documentation is still in German at this stage, which can make things a little bit more difficult, but dig out a copy of the old manual and you'll find that most of the information still holds true.

The copy of *Gemini* reviewed here is a very late beta-test release (1.99 to be precise). No registration fee is payable at this stage, but that is likely to change when the finished product comes on-line. Watch your local PD library for an official release within the next few months.

ST REVIEW COMMENT: "Gemini falls short of its commercial counterparts in some ways, but it's still an awfully good desktop. The inclusion of a CLI means that complex copy operations can be carried out reasonably easily and the whole thing feels very classy. If you can spare the memory to run it properly and like the idea of the console, it's worth its weight in Milky Bars."

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The boring green desktop can be replaced with a picture of your choice and Gemini cleverly preserves the colours used for icons.



TOP TEN DESKTOP UTILITIES

1 GEMINI 1.99 • CIX BBS • ATARI.ST/2LISTINGS AREA • FREE • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

Gemini represents the state of the art in shareware desktop replacements. Beyond the silky, efficient interface there's a good deal of power and a command-line interpreter is built-in to take care of the tricky stuff. Here's looking forward to the full release!

2 AUTOSORT 4.1 • FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE

Rearranging your Auto folder to accommodate fussy utilities is a piece of cake with *Autosort*. The interface is about as intuitive as they come and it even works with the Falcon's internal IDE drive. Fully mouse-controlled and thoroughly efficient, it should be a part of every ST owner's collection.

3 TERADESK 1.4 • GOODMAN INTERNATIONAL • DISK NO: BY NAME • £1.95 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE

If you are in search of a no-frills desktop replacement, *Teradesk* is the kiddie to go for. It features most of the bells and whistles of TOS 2.06 while consuming very little memory, and definitely looks the part. The latest version boasts *MultiTOS* and *Geneva* support.

4 ALBION • THE ST CLUB • DISK NO: DMG.41 • £2.25 • MEMORY: 0.5MB • FREEWARE

Albion is a general purpose file utility. Its main claim to fame is the ability to add extended characters to disk, folder and volume names, but on a more practical level it can be used to permanently erase files from a disk (as opposed to just marking them for deletion, as GEMDOS does).

5 GREPIT • FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE

Searching for strings on a hard disk will never be the same again thanks to *Grepit*. This powerful search utility may have looks to kill, but make a closer examination and you will find that most of the complexity is still there too. A very useful tool nonetheless.

6 ST WHIZZ 2 • FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • SHAREWARE

GEM program launchers are ten a penny, but this one is slightly better than average. It stores ten groups of up to sixteen programs and the parameters passed to each can be adjusted easily. It can also display a log of the programs run and how long they were used for.

7 SH-BUFF • THE ST CLUB • DISK NO: DMG.39 • £2.25 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

Later versions of TOS can throw a wobbler when it comes to installing too many applications, or laying too many icons on the desktop. SH-BUFF utility increases the memory area known as the "shell buffer" and neatly removes the problem altogether. Pop it in your Auto folder and forget about it.

8 AUTORAISE • THE ST CLUB • DISK NO: DMG.38 • £2.25 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

Fed up with juggling windows on the desktop? In that case, you need Autoraise. This clever little desk accessory carefully watches the mouse pointer and "tops" any window it passes over. Naturally, it can be disabled easily when it comes to applications with slow screen updates.

9 CHOOSE INF • FLOPPYSHOP • DISK NO: F.4632 • £2.50 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON ONLY

If you are looking for an easy way to handle multiple DESKTOP.INF files, Choose Inf could well be the answer. By default, the program loads every time your machine is booted, but by adding a "C" to the end of the filename, it will only appear when the <Control> key is held down — sorted!

10 DISK LABEL • THE ST CLUB • DISK NO: DMG.31 • £2.25 • MEMORY: 0.5MB • FREEWARE

Disk Label is a nice way to keep your public domain collection up to date. It's designed to print properly-sized disk labels with the volume name at the top and all of the files listed tidily underneath. File sizes, disk format parameters and bytes used can all be displayed if required.

PD ZONE



Psychedelic plasma and awesome sound prove that the Falcon's got what it takes to rule the demo scene.

CYCEDELIC KNOCKOUT

FLOPPYSHOP • DISK NO: SF.4667 & SF.4668 • £4.50 ALL IN • MEMORY: 4MB • PUBLIC DOMAIN • FALCON ONLY • HARD DRIVE REQUIRED

IN BRIEF: Cycedelic Knockout (try getting that past a spell-checker... Ed) is living proof that demo coders are finally getting to grips with the Falcon's hardware. The demo starts with a Star Trek sequence, which introduces the programmers and prepares you for the effects you are about to experience. The display then explodes in a flash of white light and you are left with a series of intense images that wouldn't look out of place at a rave. High quality music pumps along in the background throughout and the visuals are sequenced with the sound as far as possible.



Cycedelic Knockout is jawdropping stuff indeed and the excellent intro adds to the atmosphere.

The show lasts for around ten minutes and then you are given another rundown of the credits, backed up by a gorgeous coloured rain effect. At this point it's probably wise to take a quick lie down!

ST REVIEW COMMENT: "Knockout borders on the mindblowing at times and the music makes excellent use of the Falcon's stereo sound. The effects themselves aren't technically outstanding, but suit the mood of the demo well and all in all it's an experience that no die-hard raver will want to miss."

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TECHNO DEMO

FLOPPYSHOP • DISK NO: DEM.4413C • £2.00 • MEMORY: 1MB • PUBLIC DOMAIN • STE ONLY

IN BRIEF: You may not be able to run Cycedelic Knockout on your ST, but the Techno Demo is probably the next best thing. It too is a thoroughly ravey type experience and features a mixture of flashing lights, vector graphics and aggressive sound. Although the ST obviously has fewer colours to play with, it still manages to muster up a totally psychedelic expe-



The Techno Demo features swirling patterns and hyperactive dancers in time with loud music.

rience. The sound quality is generally very good, although one or two links between tunes could have been improved and I'm sure we could have done without any 2-Unlimited!

Interspersed with the vector screens are overlays of rave dancers, which are presented rapidly flickering between black and white. It's practically impossible to watch these without squinting and if you suffer from light-sensitive epilepsy, it might be wise to give this one a miss...

ST REVIEW COMMENT: "The *Techno Demo* isn't quite as well produced as *Grotesque*, but it's still an incredible achievement on an STe. The whole screen is constantly changing and the music seems to be inexhaustible."



Colourful vector graphics are mixed with beatladen music to great effect.

THE ECSTASY DEMO

FLOPPYSHOP • DISK NO: DEM.4415C • £2.00 • MEMORY: 1MB • PUBLIC DOMAIN

IN BRIEF: There are literally dozens of 3-D demos in the public domain, and it takes something really special to turn heads and to entertain. *Ecstasy* contains a little sprinkling of that magic.

The star of the show is a flight through a virtual city – the buildings are a bit sparse, there's no doubt about that, but it runs so smoothly you can't help being impressed. Also entertaining is the morphing vector screen. Instead of just removing one shape and dumping another on the screen, the programmers have used an effect where the first is shattered and reforms into the second – just mesmerising!

The music to accompany the show is very moody, but does get a bit repetitive after a while. Thankfully, none of the effects last too long and it doesn't wallow too much in technical achievement; in other words, there aren't any scrollers. Slotted in between the harmless 3-D graphics there's a rather seedy greyscale picture – you have been warned!

ST REVIEW COMMENT: "Ecstasy contains some of the smoothest and most impressive 3-D graphics you will see on the ST. It's not wildly entertaining, but is a good deal better than many similar offerings and collectors would do well to add it to their collection."



Mercifully, scrollers are kept to a minimum and the effects aren't overdone – a few seconds of each is all you get. Impressive 3-D graphics run throughout and the entertainment value is reasonably high.



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GAMES

(GAME 168 -	Napolean - a	'Risk'style game of	war and	strategy.	H'.

Oxyd 2 - the sequel to the brilliant Oxyd, much harder than the original. "H"

GAME 11

GAME 83

GAME 151

Oxyd 2 - the sequel to the brilliant Oxyd, much harder from the original. 'H'
Tetric - new Tetrs type game. 'H'
- Shocker 2 - Excellent ball / puzzle/ strategy game similar to Oxyd. 'I Meg + H'
- Shocker 2 - Excellent ball / puzzle/ strategy game similar to Oxyd. 'I Meg + H'
- Nobi Ricaria - Cantrol your snake to callect all the objects on the screen. 'H'
- A Question of Snooker, Pinball, Devestator, Roll in Nudge, Ranger.
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GAME 189 - Cud Lee's Quest - platform game for kids, Mindmelt - roleplatoring fantasy game.

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Money Mania - callect all the money from each screen, loads of nasties etc. Good. GAME 209

GAME 210 GAME 211

Monley manual - Collect all me monley from each screen, locate or nasties etc. Usoca. Kulhless, shoot em up, Spherical - good platform game, Serendipily exp dod puzzler. War of the Worlds 3 - 3D game I Mege, Pac Attack - very good new Pacman done. Combat - shoot 'em up similar to Operation Wolf. Space Wars 2000 - doglight. Darts 180 - mouse controlled Pub darts game. Stone radier - boulderdash clone.

GAME 216 GAME 217 GAME 218

Darts 180: mouse controlled Pub dorts game. Stone radier - boulderdash done.
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- Starball - aboutley brilliant pindling Jame with 4 sub-gamest Excellent!
- Winglord demo (like Joust), Snacmon, Sqish, Well "Ard - arcade/ odventure. GAME 219

GAME 221

GAME 224

- The Brace Demo - nice auto-running multi-part from Diamond Design.
- The Edge of Panic Demo - a good STE only demo by ACCS.
- Exhaust demo - another good STE only demo by ACCS, 1 meg EXACTLY!
- Sid James Demo - clips from the films - STE only 1 meg+, 2 disks \$3.50.
- Readily is a Lie - a 13 screen demo by Psychomix, very good. 1 meg+.
- Cemetary demo - a good digi-music demo.
- Beginning of the Ending - this demo actually plays in the background of a game of Ereakour which is played with 5 balls! Hows your concentration. **DEMO 355** DEMO 351 DEMO 350 DEMO 342

DEMO 335

ART & GRAPHICS

ART 1 - A disk full of 23 miscellaneous utilities including viewgif 1.2.

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WORDPROCESSING & DTP

ST Writer Elite, EDI Text, Zap ST, ST Page, Typist, Desk Accessories. 'A'. First Word + tools, Grammar checker demo, Spell Binder, Text Filter. 'A'

WORD 5

Calamus Demo, no save function but you can print. 14t.

Calamus Demo, no save function but you can print. 14t.

Calamus Support disk. - loads of utilities for Calamus and fonts etc. 14t.

Papyrus Office Demo 2.26 - good document processor with fonts etc. 14t.

Calamus S demo - fully functioning except save. 2 disks. \$2.50. 14t 1 Meg+.

DB Writer 1.8 - very slick wordprocessor with spellchecker. Many Features. (A).

Marcel 2.2 - Nice new wordprocessor with spellchecker and many functions. (A). WORD 13

BUSINESS

BUSI 2 - Sheet 2.0, Dbase One, First Base 1.6, Home Budget Template. 'A'.
BUSI 4 - Opus 2.2 - brilliant spreadsheet. 1 Meg+, 'A'.
BUSI 5 - Double Sentry Book Keeping System, Address Book, 'A'.
BUSI 11 - Compact Office Management Program 2.05 - for businesses, ions of features. 'A'.
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James The Buller, London Phone Codes, Memory'S, Pinhead, Super Calendor Batch Startup, UTIL 2

UTIL 6

UTIL 13

- James Ihe Buller, London Phone Codes, Menus YS, Pinheod, Super Calendor Botch Start Auto Sort, Postnorten, No Bombs, E-Diak, P Quick Uhillies: X¹
- German to English translator, fast Print, DC Salvage, MiNT, Maccel 3.0. (A¹.
- Printer Drivers in Conon Bubblejet, Quime Daisywheel, Brother + Epson: X¹.
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UTIL 45

STOS Shoot em up builder kit 0.6 - colour only.

UTIL 57

UTIL 59

Nos usex CUI, terra Destop 1.35 - replacement desklops. 'A',

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- German To English 3.0 - lotest version of this file translator, includes computing. UTIL 62

UTIL 82 UTIL 83

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- Arpeggiator, Zeppelin, MIDI Beat, Project, Jukebox, MKS-50. 'A'. Henry Cosh Sequencer, Composer. 'A'

MUSIC 11

Henry Cash Sequencer, Composer. 'A'.

Yamaha PSS790 Editor, includes loads of sample voices.

- Tamana roos PV Ecitor, includes loads of sample vaices
- Alchemie Junior 2.2 - sequence with real-time, multitasking etc. "H".
- Sound Merlin - good ex-commercial program, Mazart's Dice Waltz - compose music
without musical knowledge. "H".
- Octalyser 8-track tracker - STE only, Protracker 2.1, YM Tracker.

MUSIC 24 PSS Utilities disk, loads of programs including patch editor, librarian etc. 'A'
 Casio CZ sounds, 32-track sequencer, Kawai K1 editor, MIDI menu, 'A' MUSIC 26 MUSIC 27

Kawai K1 synth sounds. 'A'. Roland 'D' Series Sound Banks for D5, D10, D20, D110 and GR synths. 'A'. MUSIC 29 MUSIC 35 MUSIC 36

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Octalyser 0.9 - new version of this great 8-tracker program. STE only MUSIC 53

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PROGRAMMING

- Sozobon C Compiler release 2. Includes documentation, shell etc. \$3.50.

- GNU C++ Kiit - Hard Drive + 2. Smeg required, not for novices! 5 disks £8.00.

- Professional GEM guide - 17 chapters of tutorial with C source.

- STOS Totorial and various Basic programs.

- GFA Basic v. 2.0 - GFA Expert - on lice GFA Basic tutorial.

- STOS Tracker - adds a new set of STOS commands for Soundtracker.

- STOS Extensions: Missing Link, Misty, Billier, MIDI, STE, +7 more!

- STOS Sobressop pook 1 - millions (almost) of routines etc.

- STOS 3D - brilliant extension allowing you to program in 3D, 2 disks £3.50.

- A disk crammed to the brim with STOS ACBs. LANG 1/2 LANG 5-9 LANG 13

LANG 16 LANG 27

LANG 37 LANG 41/42

LANG 43

 A disk crammed to the brim with STOS ACBs.
 STOS Adventure Creator 1.03 - write your own graphic adventures. 'C'.
 Heat 'n' Serve Sozobon C - a very easy to install version of this compiler. 'A'.
 STOS Extra Extension 2.01 - adds about 52 new commands to STOS. 'A'.
 The latest issue of STOSSER disk magazine, tutorials, articles, reviews etc.
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 ST-68K Reference 3 - includes full data on ST internals, excellent. £2.95. LANG 53 STOS 17

BUPRO 16

THE ST HANDBOOK - £2.50 A brilliant new magazine dedicated to PD and Shareware with stories, articles, news reviews, competitions, charts and lots more! Issue four is now out and this issue comes with a free cover disk full of games and utilities. New Age PDL are official stockists of the ST Handbook - order your copy now! A bargain at just £2.50. Please state which issue.

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PD ZONE

Soad the file you wish to check vis the file selector. If Brawmarian fields ampthing of interest in the file, the program all stop and fileds ampthing of interest in the file, the program all stop and selection of the file of the file

Grammarian is good at pointing out simple errors but it doesn't allow corrections to be made "on the fly".

GRAMMARIAN

GOODMAN INTERNATIONAL • DISK NO: GD.2317 • £1.95 • MEMORY: 0.5MB • POSTCARDWARE • FALCON-COMPATIBLE

IN BRIEF: Spell checkers are now considered to be an essential part of every word processor and it won't be long before we are all expecting software to check our grammar too.

Grammarian is a public domain program designed to do just that, albeit in a limited capacity.

The program works by following a set of rules – for example, "affect" and "effect" are often confused.so the software picks them out and offers an explanation of the possible problem. The configuration file is simply text

S officials

Sto 'strawe', the dictioney allow use at afterwork only as a fine with the state of the state of

All of the rules are contained within an ASCII file and additions are easy to make with the help of a text editor.

and new rules can be added very easily. The program only works on ASCII files and doesn't permit editing of the document, so it's just a case of noting down any changes that need to be made. However, the whole thing does work very well, despite a rather rudimentary interface.

ST REVIEW COMMENT: "Grammar checkers are never perfect and this one is no exception. It does provide pointers to some mistakes, but in order for it to be truly useful, the .INF file needs to be expanded; and if your grammar is good enough to do that, you might well be able do without the checker anyway!"

00

TRANSLATOR 2.01

FLOPPYSHOP • DISK NO: UTL.4657 • £2.00 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

IN BRIEF: German to English translation programs are rapidly taking the place of disk formatters as the most rampant species in the ST public domain. Very few, however, can claim to be as good as Translator 2. The program itself is presented through a simple windowbased dialogue box. Pop-up menus allow you to adjust the source and destination language and it's also possible to fiddle about with the accuracy of the translation. Best of all, an enormous

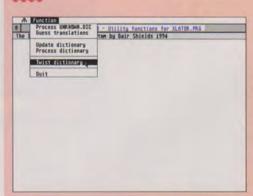


A number of different languages are supported by Translator, although only a German dictionary is supplied on the disk.

German dictionary is included on the disk, but you will have to dig around if you need to deal with other languages.

A separate program is included to maintain the word lists, and dictionaries can also be "reversed", so changing a German to English dictionary into English to German. The registration fee for this minor miracle? Just £5!

ST REVIEW COMMENT: "Most German to English utilities are functional without being exciting, but *Translator 2* is the exception. It looks great and is blisteringly fast when using a hard disk. The only niggle is that there's no way to view the translated file from within the program itself."



All of the utilities are tucked away in a separate program to keep the main interface as clutter-free as possible.

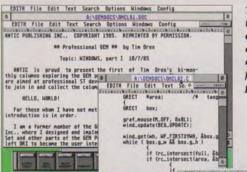
THE HELP DISK

MERLIN PD • DISK NO: ESE.075 • £1.25 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

IN BRIEF: Numerous help files are to be found scattered around the public domain and this disk from Merlin bring two of them together. First up is a user's guide to *Teradesk*. It runs to just over 30Kb and contains a lot of really useful hints and tips. Unfortunately, the author does have a habit of waffling just a little bit and you do have to read quite a lot of irrelevant information just to get down to the nitty-gritty. It is very good grammatically though.

On a slightly more techie note, issues 1 to 14 of Tim Oren's excellent GEM programming tutorial are also included on the disk. It is beginning to show its age now, but as it was written by one of GEM's designers, you can be sure of the information's integrity. A small selection of utilities round off the collection.

ST REVIEW COMMENT: "If you use *Teradesk* or have a desire to learn GEM programming, this disk is well worth getting hold of. Both of the text



Tim Oren's GEM tutorial may be old, but it still contains some excellent tips for budding ST programmers.

files are very informative, well written and you don't even have to worry about paying a registration fee."

The Teradesk tutorial contains some genuinely useful hints, even if does take its time to spit them out!

CMC

FLOPPYSHOP • DISK NO: FWG.06M • £3.00 • MEMORY: 0.5MB • LICENCEWARE • FALCON-COMPATIBLE

IN BRIEF: CMC is a custom Colour to Mono Conversion utility. It's been designed to work in tandem with programs like *Timeworks* that dither internally, but don't always make an exceptionally good job of it.

Two modes of operation are available. The first is called "layer mode" and simply allows you to switch off certain colours in the picture and save the result. "True mode" is a little bit more sophisticated and uses a specific dither pattern for each of the colours in the ST's low resolution palette. You are offered complete control over the allocation of these patterns and when finished the whole picture can be saved as a high resolution Degas file. The interface is mouse controlled and very easy to use, although it does ignore things like the standard file selector, which is a little bit annoying. CMC is high resolution only, but an emulator is supplied on the disk.

ST REVIEW COMMENT: "CMC is an innovative program and does its job very well, but on the other hand, it is quite hard to see its practical value – unless you are disappointed with the dithering quality offered by *Timeworks* or similar in which case it's well worth investigating."

In True Mode, each colour is represented by a dither pattern and changes are simply a case of clicking the appropriate button.



ZORG

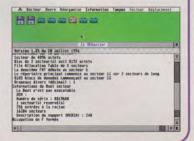
FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

IN BRIEF: Fragmentation is the bane of every ST owner's life – it can slow down hard disk file access and make recovery much more difficult in the event of a crash. *Zorg* is a program that will sort out this and many other problems associated with using a hard drive. It comes bundled up in a beautiful little GEM interface and is reasonably easy to use despite the French prompts – just check out the English introduction if you get stuck.

Not only will Zorg deal with your hard disk in "peaceful" times, it will also have a go at rescuing data from a damaged drive. In fact, a separate utility is supplied to access partitions that are even too far gone for a standard driver to use. It's a very powerful program, but do make sure you back up any important data before you use it...

ST REVIEW COMMENT: "Zorg is a quality piece of software and the interface reflects that fact well. It's also one of the first shareware packages capable of both editing and defragmenting a hard disk. You might want to give it a miss until English instructions are available however."

Zorg is probably the most powerful disk optimiser ever to hit the public domain – great interface too!



TOP TEN UTILITIES

1 ZORG • FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

Treat your hard disk to a well-deserved spring-clean with *Zorg*. Over and above defragmenting, it offers a graphical display of disk usage, several analysis options and the ability to back up boot sectors just in case the worst comes to the worst. French prompts make it a little more difficult to use than it need be.

2 TRANSLATOR 2.01 • FLOPPYSHOP • DISK NO: UTL.4657 • £2.00 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

The vast majority of good ST shareware comes from Germany and this powerful utility is an ideal aid in translating the documentation. Naturally, the text files it produces are far from perfect, but at the end of the day it's got to be better than working with a German to English dictionary!

3 LINE UP 3 • FLOPPYSHOP • DISK NO: FWG.10C • £3.00 • MEMORY: 0.5MB • SHAREWARE

The freeze frame on most domestic video recorders is rarely perfect and this leads to misaligned pictures when using a cartridge like Vidi-ST. *Line-Up* solves the problem by allowing you to readjust the colour components. Although very little has changed in this upgrade, it's still a worthwhile purchase for any Vidi user.

4 COMMON WORDS • MERLIN PD • DISK NO: ESE.075 • £1.25 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

Common Words could come in handy when used with Grammarian to analyse your writing style. It prepares a list of the top twenty words used in a document and displays them alongside the number of occurrences. It's a .TTP utility, but the drag and drop approach seems to fire it up nicely under TOS 2.06 or above.

5 FLOP FIX • THE ST CLUB • DISK NO: DMG.41 • £2.25 • MEMORY: 0.5MB • PUBLIC DOMAIN

Flop Fix adds its name to the growing number of patches for TOS. It works with all versions above 2.06 and sorts out some problem with floppy disk access. If you are having difficulty in this area, it's probably worth installing, but the usual rule applies – if it ain't broken, don't fix it!

6 THE HELP DISK • MERLIN PD • DISK NO: ESE.075 • £1.25 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

GEM programming and *Teradesk* are the two topics addressed by this compilation disk from Merlin. Both of the plain text files are packed with useful tips from experts and the *Revenge Document Displayer* is included on the disk to make viewing just that little bit easier.

7 KEYBOARD BELL • THE ST CLUB • DISK NO: DMG.41 • £2.25 • MEMORY: 0.5MB • SHAREWARE • STE/TT ONLY

Banish the old system bell from your STe forever with this utility from Astrasoft. In the place of the usual "ping" you will find a very refined piano note and the whole shebang occupies just 9Kb of disk space.

8 GRAMMARIAN • GOODMAN INTERNATIONAL • DISK NO: GD.2317 • £1.95 • MEMORY: 0.5MB • POSTCARDWARE • FALCON-COMPATIBLE

Grammar checkers are the "in thing" for PC word processors at the moment, but here in ST land we leave that sort of thing to the public domain. *Grammarian* is a little basic, but with proper training it could turn into quite a useful program.

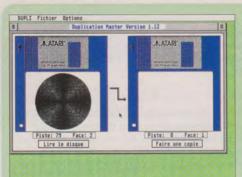
9 CMC • FLOPPYSHOP • DISK NO: FWG.06M • £3.00 • MEMORY: 0.5MB • LICENCEWARE • FALCON-COMPATIBLE

CMC is a rather novel colour to mono conversion program. It uses a different dither pattern to represent each colour shade in a picture and allows you to control which pattern goes where.

10 VMEM • FLOPPYSHOP • DISK NO: F.4632 • £2.50 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE • HIGH DENSITY DISK DRIVE REQUIRED

Virtual memory is usually restricted to machines with an '030 processor, but this German programmer's library allows "normal" STs to have a slice of the action too. Applications need to be programmed specifically to take advantage of *VMEM*, but a supplied utility proves that it does indeed work.

PD ZONE



By saving disk images to a hard drive, Duplication Master can drastically reduce copying times.

DUPLICATION MASTER

FLOPPYSHOP • DISK NO: F.4632 • £2.50 • MEMORY: 4MB • PUBLIC DOMAIN • FALCON ONLY

IN BRIEF: Duplication Master takes a new approach to the age-old problem of copying disks. Instead of forcing you to endure constant swapping, it reads the whole of the source disk into memory and then allows you to make as many copies as you like. What's more, master disks can be saved as images to a hard drive and loaded again instantly. It's ideal for PD libraries or collectors, although plenty of disk space is needed to store any number of images. Additional perks include the ability to check for viruses as a disk is loaded and adjustable priority under MiNT. In fact, Duplication Master can be used as the default formatter and copy program when using MultiTOS. A very attractive mouse-driven interface fronts the whole thing and it is pretty easy to operate considering all of the prompts are in French.

ST REVIEW COMMENT: "Duplication Master isn't as powerful as FastCopy Pro, but by working with images saved to a hard drive it can be very nippy

indeed. The French prompts are a bit annoying, but the GFA source code is included, so you can change them if you're that bothered."

If you are wondering how much disk space an image is going to take, summon the information box.



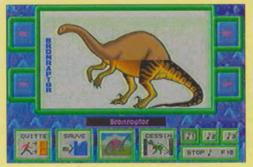
LES DINOSAURES

FLOPPYSHOP • DISK NO: F.4553 • £2.50 • MEMORY: 1MB • SHAREWARE • FALCON ONLY

IN BRIEF: Blend slick presentation with an educational theme and you will end up with something like *Les Dinosaures*. It's an educational title based around prehistoric creatures (*yep, figured that... Ed*) and really shows what owning a Falcon is all about.

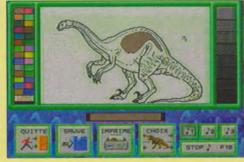
Having progressed through the introductory sequence, you are presented with a central window containing a split picture of a dinosaur. The idea is to match the top and bottom halves of the picture and then to click on the question mark button to get some more information. There's also a neat little colouring book section to play with. Both graphically and sonically, you are looking at some of the best shareware seen on the Falcon so far. The demo version is limited in that there are only three dinosaurs to see and also none of the supplementary information is included.

ST REVIEW COMMENT: "From a technical point of view, *Dinosaures* is excellent and the graphics are truly stunning. On the other hand, it's hard to see how useful it's going to be in Britain unless you happen to be teaching your kids French..."



Luscious graphics and a superb soundtrack line Les Dinosaures from end to end – English version please!

Once a dinosaur has been matched, the paint part can be used to colour the picture in.



MOVE OVER

FLOPPYSHOP • DISK NO: F.4632 • £2.50 • MEMORY: 1MB • PUBLIC DOMAIN • FALCON (RGB) ONLY

IN BRIEF: Move Over is one of those marvellous utilities that does very little and yet can be considered almost an essential purchase. As all RGB users know, the Falcon's idea of overscan isn't always the same as your monitors and all too often, the picture can be in totally the wrong place. Move Over is a program that allows you to correct that problem.

The whole thing runs as a desk accessory and the position of the screen on the monitor can be easily adjusted "live". The documentation is laden with the usual "use this program at your own risk" type messages so caution is recommended, but having said that, it doesn't seem to have caused any damage to our monitor. Once a good working set-up has been found, the configuration can be saved as a program and installed every time the machine is switched on.

ST REVIEW COMMENT: "Overscan problems are a thing of the past with *Move Over* installed and it could come in very handy when working with screen-expanders like *Multi-Blow*. A great utility.



The results may not be guaranteed, but Move Over certainly seemed to work well enough on our system!



Interesting screenshot number 2001 – the screen can be moved to a new position by simply dragging the mouse.

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In need of a decent disk copying and formatting program? Mike Robinson investigates the possibilities...

ou may think that formatting

ISK COPIERS AND FORMAT

disks and copying files are simple tasks that are best done from the desktop. This is true if you only need to carry out the occasional file back up. If you find that you spend much of your time watching the desktop "thermometer" bar slowly moving across the screen

while formatting disks then it's time to consider some of the alternatives! A wide range of file copiers and disk formatters are available. Some

are free while others may cost up to

£50, but they all share one basic feature - they are fast!

FASTCOPY 3

This is arguably the industry-standard copier. Tried, tested and used by all, from the home ST owner to PD libraries and MIDI file suppliers. FastCopy 3 and its commercial incarnation FastCopy Pro have proved both reliable and friendly.

The interface is simple and it takes less than five minutes to find your way around the basic functions which include formatting and copying floppy disks. FastCopy 3 copes with all formats, from single sided to high density and is also able to extend the number of tracks on the floppy

disk and the number of sectors per track. A standard FastCopy 3 is an all-time favourite double-density disk can be formatted to contain over

of many users - and it's free!

800Kb of data using these options. FastCopy 3 even goes as far as basic hard disk back-up, but never quite manages to be convincing. On the other hand, its floppy formatting and copying options are outstanding. When copying disks, FastCopy checks to see if the destination disk is formatted and, if not, goes ahead and formats it automatically. It also saves time by copying only the used sectors of the disk, instead of all of them. Another useful function is called Soft Format which effectively deletes the contents of a disk in about three



FastCopy allows you to view the contents of a disk before copying or formatting.

Diamond Format is a simple, no-fuss disk formatter. It is small and uses very little memory - but is also rather slow.



DIAMOND FORMAT

Unlike the other formatters in this round-up, Diamond Format is very simple. It's a free utility and is also included as part of HiSoft's Diamond Format hard disk back-up package.

There are only a few options: selection of single or doublesided disks, double or high-density and a choice of three formatting schemes. There is also a zero disk function, which wipes the disk pronto, and a verify switch. None of these is unique to Diamond Format and are available in most other copiers. Surprisingly, Diamond Format is extremely slow - it takes twice as long as most other programs to format a disk. In fact, it appears to be even slower than the desktop!

UNDER THE SPOTLIGHT...

Find out how our four main contenders stand, head-to-head...

		Disk copy?	File copy?	Verify switch?	Multiple copies?	Mark bad sectors?	Macros?	Check disk?	Zero disk?	Desk access
)	FastCopy 3	1	×	1	1	1	×	/	1	1
	НСору	1	×	1	1	1	×	1	1	1
1	Diamond Format	×	×	1	×	×	×	×	1	1
	Kobold	×	1	1	×	×	1	×	1	1

HCOPY

The first thing you notice about HCopy is the close similarity to Fast Copy. Indeed, the two programs are almost identical, but you can't help but be most impressed with HCopy. The user interface is a step up and there are several options that do not exist in FastCopy 3.

There are eight preset disk HCopy appears to be a reworked formats to choose from including FastCopy with a few extras HCopy can copy disks most effi- for all important functions. ciently and is, in fact, marginally

frk derjasterske i jeder de	212 - 124 -	
Source: B B T CONTROL B Best. B B B B B B B B B B B B B B B B B B B	Sectors: -9 Tracks: -88 Sides: 1 C1-Size: 1	Used Onty Ruttiple Copy Format Dest. Format Needed Fast Format
Cook New Zero Bisk	Scan Disk Di	rectory Info

some specifically designed for PC thrown in. The user interface is compatibility. Like Fast Copy, good, with keyboard shortcuts

faster as well. Both programs are able to detect bad sectors on a disk and mark them as such, enabling you to use even faulty disks.

The only two options that were missing are the less-than-perfect hard disk streaming and a virus checker. However, for some reason, HCopy never caught on in the same way that FastCopy did. This is probably due to it being a shareware program with a registration fee of 30DM - and the continual appearance of a nag screen with non-registered versions. Also, the registered program can only be run as a desk accessory, which is a little

KOBOLD

If you need a really powerful tool and are willing to part with £50, you need look no further than Kobold from System Solutions (081-693 3355). This is simply state of the art when it comes to copying files, but it does much more. That said, it should be noted that while FastCopy and HCopy are primarily designed for disk duplication, Kobold is better suited to selective file copying.

Like the rest, Kobold can run both as a stand-alone program and as a desk accessory, but also has the ability to multi-task and copy files in the background while you're doing something else, a very useful facility if you own a hard disk. Kobold does not work as a straight-forward disk copier but rather as a file copier, allowing you to selectively copy files from one disk to another.

Files can be selected manually or by satisfying certain conditions. For instance, Kobold can be set up to copy all files that have the extensions .DOC and .TXT that were created after a specified date. In addition, Kobold has a powerful macro facility which means that you can record complex tasks and then recall them at the click of a mouse.

By using custom copying routines, Kobold has no competition when it comes to speed. In addition, Kobold supports every imaginable formatting option.



Kobold is a powerful tool capable of selective copying at speeds that have to be seen to be believed!



Tracks: a floppy disk is divided into tracks, similar to the idea of grooves on a record. The standard format has 80 tracks starting at track 0 which is located near the centre. Disk capacity can normally be extended a little by using the tracks nearer the edge of the disk.

Sectors: the basic storage unit on the disk. Normally, disks are formatted with 9 sectors per track, each having a capacity of 512 bytes. Verify: the operating system has a built-in verifying system that always

checks whether the contents of a floppy disk are as intended. This is a useful precaution but if disabled, formatting and writing times are almost halved. Twister Format: there are various formatting algorithms that change the order of sectors on a disk to achieve optimum performance. Twister is quite popular and results in faster disk access although the actual formatting process usually takes longer.

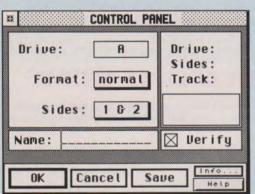
Extended Formats: formatting schemes that use more than 80 tracks per side and/or more than 9 sectors per track. This results in higher capacity, often exceeding 800Kb per floppy disk.

SPEED TEST

We used each of our main programs to format a double-sided double-density disk on a Falcon...

Program	Time Taken (secs)
FastCopy 3	69
НСору	67
Diamond Format	135
Kobold	67
Desktop	98

OTHER TAKERS



The Disk Formatter CPX can be a life-saver. No fancy tricks or speed here, just a simple formatter that is available from XControl without consuming any memory...

The four utilities mentioned here are just popular examples - there are just too many copiers and formatters available in the public domain to mention here. These include Cheetah which, like Kobold, offers extensive file-based copying functions, and a small, useful CPX module called Format CPX which has the advantage of always being available without using any memory.

pecial formats?	Extended formats?	Automatic formatting?	Multi-tasking?	Ease of Use	Documentation	Effectiveness	Value for Money	Overall
×	1	1	×	10	6	8	10	85%
1	1	. 1	×	10	N/A	8	8	87%
1	1	×	×	10	N/A	5	9	80%
1	1	×	1	10	9	10	8	92%

HAPPY FAMILIES

f you followed last month's tutorial, you will have created a three-generation tree of a Cheshire farming family. This month we're going to look at some other features of this comprehensive genealogy program.

Load the file you created last month and let's start the generation game again!

FLAGS

First, let's look at the flags you find on the Preferences screen. About half-way down you will see flag fields A to F. You can fill in each field with a flag name that relates to individuals entered into the tree. For instance, if there are some people with missing dates of birth, you could make Flag A "MISSING D.O.B." Flags can help

Any scandals in your family's history? Colin James presents the second instalment of our Family Roots tutorial...

enormously when you are searching a large tree for certain individuals.

Type in "MISSING D.O.B." in the Flag A field and then click Screen to return to the Workscreen. For a test, right-click Minnie, delete her date of birth and then click Flag letter A to set the "MISSING D.O.B." flag. Return to the Workscreen and click S to go to the Search screen. Click Subject and then the A flag. Return to the Search screen, set the search to Subject by clicking on "Subject" next to Categories and then click Search. The search result will show just one person: Minnie.

With six flags to make use of, there

The names you type in the Define Date and Define Nme fields here can be used later on to provide specific information for your particular

Flag A is set for an individual's missing date of birth. Clicking the A flag on a subject's database card means they will be found by a subsequent search that makes use of the flag.

PREFERENCES / OPTIONS
Henory used : 1338 Henory free : 2714232 Total entries: 4
Field Display : Feint Text Case : Lower Text display : Mornal
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Define Date : def date Define Rne : def text Define Rne : def text Filenane : examplePNT
Roots Tidy Info Printer Clear Load Save Quit Screen

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If you're enjoying our *Family Roots* cover disk, you may want to upgrade to version 2, as reviewed in the last issue. This has various advantages over the original including:

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will be no shortage of ways of finding the people in your trees who meet precisely the criteria you want – you have a very powerful tool to find people from particular areas, branches of the family, occupations and so on.

CUSTOM FIELDS

Another useful feature is the ability to set up user-defined fields on subjects' data cards. Below the flags in the Preferences screen you will see Define Date, for any date input, and two others called Define Nme for free text (up to 10 characters). For instance, if you were trying to record colours of eyes through the generations, you could use one for EYE COLOUR. Whatever you type in, these fields appear as field names at the bottom of each subject's database card - and you can use this information as part of your search criteria.

PRINTING

Before trying to print anything, or even set your print options, you must first define a block on the Workscreen – click B and then draw a rectangle around the graphical representation of the tree. On the Preferences screen, click **Printer**, and the Printing Section screen appears.

The vertical column of letters

(A to M) indicate the available printing options. Experiment with these options through the corresponding "OPTION" letters at the bottom of the screen.

Set up your printer by clicking the Setup and Prefs options. If you get stuck, click on Info at bottom left and all should be revealed.

Clicking the **Print** option on a subject's database card calls up a dialogue box that asks if you wish to print to **Disk**, **Printer** or Screen only. The first option "prints" a text version of the person's details to the default drive, using the person's unique reference number as the filename with an .ASC extension.

Printer sends the file to your printer provided it's on line and loaded with paper, and **Screen only** "prints" the person's details to the screen. The information scrolls up the screen before disappearing.

AND FINALLY...

This two-part tutorial has covered nearly all the features of *Family Roots*, sufficiently, I hope, to get you started on your own genealogy trail.

Be warned – it can be infectious! Family Roots can help enormously, but it will be your own fascination with the subject that will spur you on to possibly great discoveries. Good luck in your searching – and enjoy every minute of it!

				ividuals.
Option	Туре	Units per Screen	Screens per Block	Total screens
DEFGHIJ	Text	29488 X 6489 10248 X 3289 5120 X 1698 2568 X 808 1280 X 400 640 X 200 320 X 100 128 X 40 64 X 20 32 X 10 Print 3 Detabase 160 X 25 320 X 25		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

The Printing
Section screen
kindly informs
you what block
size you have
selected in terms
of grid units,
and how many
individuals are
in the block

3 Steps to Frame Grabbing



1. Capture your picture



2. Convert it



3. Use it

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STEP BY STEP GUIDE

THE RIGHT **FORMAT**

There are two basic methods of formatting documents in Protext. At the most basic level, commands can be entered directly into the text file on-screen...



The ruler line is just another stored command, prefixed with the ">" symbol. "R" stands for Right, but the "L" for Left can be omitted. Tabs are represented by "!" marks and the line can be edited and copied at will. The top ruler line is the currently active one, depending on the cursor position.



The command mode prompt appears at the bottom of the screen on pressing <Escape>. Enter the command "Format", which can be abbreviated to "ft", and the new rulers will be applied. There is no limit on the number of rulers that can be used in one document.

The stored command "RJ" for Right Justify will only be applied at printing. To justify the screen display, enter "CTRL-J" and the "Format" command. Using automatic hyphenation will help avoid unsightly "rivers" of space running through the text column.

FROM START...

raphics-based word processors are easy to learn and pleasing to the eye, but try and do something that is not provided for in the menus and dialogue boxes and you come unstuck. User-friendliness has its downside: if you are largely shielded from the nuts and bolts of the software, there is little you can do to carry out desirable modifications.

This is why so many writers swear by Protext. It may not be very pretty but it's fast, powerful and open to almost limitless manipulation. Take the trouble to understand how it works and it will repay you handsomely by letting you do just about anything you wish with text.

Getting to grips with Protext is made a lot easier if you think of word processing in three distinct stages: entering and editing text, formatting it, and producing printed output. Entering text is easy and requires no

If you find the

commands confusing

buried under a heap

the on-line help can

and the manual is

of pizza cartons,

be a life saver...

Protext may look different but that doesn't mean it's difficult to use, as Günter Minnerup demonstrates...

preliminaries - no menus to be selected, no dialogue forms to be completed, no fonts to be installed. Just type away and Protext displays your input in the familiar Atari system font. It's quick and responsive, isn't

HIGHLY VISIBLE

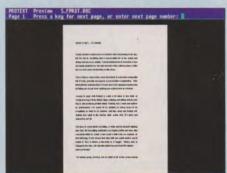
The time to worry about formatting is when you've finished entering your text. All formatting instructions are highly visible and some take immediate effect on-screen: if you insert a style code, for example, all text following it will assume that style until you insert another one to cancel it.

This is known in the trade as a "toggle". Others, such as changes to the ruler, will only take effect once you've told Protext to reformat the text.

Yet another group, however, has no effect at all on the screen display until it comes to printing. These are the extremely powerful and flexible "stored commands" which sit on a separate line and begin with the ">" symbol. A highly formatted document will soon have stored commands all over the place, and some people find this rather cluttered appearance ugly. I suppose it is, but it also gives you unrivalled control over what you are doing. Once you understand the workings of a command and its parameters, it's a doddle to achieve almost any desired effect. It is this ugly transparency that Protext "power users" prefer over the user-friendly appearance of its rivals.

COMMAND MODE

Pressing the <Escape> key switches between editing and command mode. The command line that appears in the lower half of the screen is very reminiscent of the oldfashioned DOS command prompt, and indeed many Protext commands work in a similar fashion, especially the file management commands. But do not despair: most features of Protext can also be accessed through the menus that appear when you press the right mouse button, from either edit or command mode. With a little experience, however, you will often find it quicker and more efficient to enter a command directly.



The Preview function in Version 6.5 saves paper by giving instant feedback on the effects of the formatting commands.



STEP BY STEP GUIDE

IN STYLE

Style sheets are a standard feature of most modern word processors, but how does Protext make use of them?



Protext has offered a more sophisticated and versatile method of document formatting since Version 6, using Styles that can be inserted with a simple keypress. Styles are associated with printer drivers and printer fonts, in this case PostScript.

Lend file Catelogue files Save file Save as Save all files Berge file Rename document	and formatting with commands
How Document Clear Text Clear ell files Restore Sutosaved file Command Hode ESC	is a bit like driving a car in first peer; you wring but cament reach maximum speed. Vices that let you replace a whole scrips of itections with a single helphard shortcut. Text (a single example would be your name 0), common sequences a both. Date defined, nd relaxeds later, and you can even associate a particular writing job.
	of macro cefinition is to simply let Protent typu are down, Pressing CTM-FF seitches a simple kappens selects the function kets or combination confession in register the function kets or combination confession in register the foreign characters or to insert the current ntally operavite one of these default macros cre ediate Dulls into the menu har will let use

Once the styles have been defined, you should select Document Settings from the File menu. Version 6 saves these settings with each document, but you can also have default settings or load different settings files to ring the changes.



The combination of styles and document settings provides a "command centre" that makes most command entries superfluous. Since onscreen formatting is dictated by the printer font sizes, text lines may no longer fit the screen if you choose an awkward combination of line length and point size!

TO FINISH

sing Protext without macros is a bit like driving a car in first gear: you have all the power to get moving but cannot reach maximum speed. Macros are labour-saving devices that let you replace a whole series of keyboard entries and menu selections with a single keyboard shortcut. Macros can contain ordinary text (a simple example would be your name and address for a letterhead), command sequences or both. Once defined, they can be saved to disk and reloaded later, and you can even associate a specific macro file with a particular writing

MACRO RECORD

The most convenient method of macro definition is to simply let Protext "record" whatever it is that you are doing. Pressing <Control><F1> switches the "tape" on and off, and a simple keypress selects the function key or <Alternate>, <Shift> or <Shift> <Alternate> key combination needed to "replay" the macro.

Take care, though, with <Alternate>-letter combinations, as some of these are predefined to give foreign characters or to insert the current system date. If you accidentally overwrite one of these default macros and need it back, the macro editor built into the menu bar will let you restore the original definitions.

Protext contains some power features that set it apart from other word processors. Günter Minnerup gives a couple of examples for advanced users...



Here the search-andreplace dialogue box is set to replace every second occurrence of the plain "typewriter" quotes with the proper closing quote symbol used by DA's Layout ASCII character 171. All documents in the DTP folder will be processed automatically.

Similar labour-saving effects can be achieved with EXEC files. These are similar to keyboard macros (and can indeed be assigned to keyboard macros) but are usually called from the command line by entering EXEC filename. If you name such a file EXFILE, it will be automatically executed whenever you load Protext. I am sure I haven't fully explored all the possibilities myself yet in nine years of working with Protext and sometimes feel that after another nine I'll be able to do my shopping and let Protext's macros and EXEC files get on with my writing...

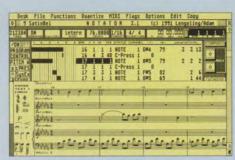
PROTEXT AND DTP

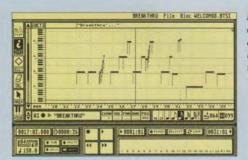
Protext is the ideal companion for DTP programs. This may seem a surprising statement to make, since few DTP packages offer import filters for Protext documents (the now defunct Fleet Street Publisher is the only one I can think of) but makes more sense once you recognise the power of Protext to generate its own export filters. Most DTP import filters are extremely limited in the text effects they will translate correctly anyway, so why not prepare your text files properly before you get to the page layout stage? Every DTP package can import pure ASCII files, but there are ASCII files and ASCII files. To avoid the misplaced linebreaks with ASCII files that end each line with a hard return character, you need to generate those where each paragraph is one long line. Many word processors cannot have lines several thousand characters long, but Protext can. Also you need to translate foreign accented characters and important typographical features such as proper opening and closing quotes and "m" and "n" dashes into whatever ASCII symbol is required by the desktop publisher. Sometimes even font changes and subscript and superscript symbols can be inserted in this way. The procedure is as follows:

Prepare a short sample file in the DTP program which includes all these features. Save it and load it into Protext for examination. Work out what any unusual characters do and make a note of their ASCII values decimal or hex - as found in the Protext Reference Manual on page 151. Then take advantage of Protext's unrivalled search-and-replace facilities to prepare your document files for export to the DTP package. Protext is the only ST word processor I know that can search and replace any character, even unprintable ones, and you can even instruct it to look for, and replace, every nth occurrence of a particular search string - useful for converting quotation marks.

You can take it even further by writing a small conversion file listing the characters and their replacements, saving it and running the CONVERT utility supplied with Protext to fully automate the process. Your work sessions with the typically slow and cumbersome DTP software will be much more pleasant, and shorter, as a result!

Notator has excellent score facilities and you can edit in the score editor and event list at the same time.





In Breakthru's grid editor, velocity values are represented by the lengths of the tails on the notes.

With so many sequencers for the ST, how do you decide which one is for you? Here's some sound advice from Ian Waugh...

hatever your level of musical expertise, from raw beginner to seasoned pro, the most important purchase you will make is a sequencer. The ST was the first computer with a built-in MIDI interface so has attracted over 30 sequencer programs.

Some of these boast dozens of confusing features. However, you don't have to use them all immediately. As long as the basic sequencer functions suit you, the more advanced functions will be useful when you're ready.

Here's a checklist of the major sequencer features you should be considering...

• Pattern or linear recording. Linear recording uses similar principles to a multi-track tape recorder.

However, pattern-based recording is infinitely more flexible and, once you grasp the basics, far more intuitive. You can use most pattern-based sequencers in a linear fashion



Controller data: a range of MIDI messages for controlling pitch bend, modulation,

pan, volume and so on.

MTC: MIDI Time Code, essentially the implementation of SMPTE in MIDI. Not to be confused with MIDI Clock.

Quantisation: pushing and pulling notes onto certain divisions of the beat to improve poor timing.

SMPTE: Society of Motion Picture and Television Engineers which gave its name to a timecode standard used in most professional audio and video applications.

BUYING A... SEQUENCER

The event list in Sweet 16 is modelled on the one in Creator and Notator.



BAR STATE DATE OF THE STATE OF

Cubase was largely responsible for popularising visual sequencing and it has a drum editor too.

too (apart from MIDI Studio), so you don't have to make an either/or decision.

- Number of tracks. MIDI only has 16 channels so why do you need more sequencer tracks than this? Well, they allow you to create multipart arrangements. Some third-party MIDI files use a full 16 tracks, some even use more. Having more tracks not only allows you to create more parts, it lets you leave some tracks empty to improve the screen layout. More tracks leads to alternative music lines and creative effects such as layered parts and MIDI echoes.
- Editors. With the odd exception, most notably *Cubase Lite*, most sequencers have an Event list. This let's you get right into the MIDI data but it's not very intuitive you need another decent editor.

If you like working with the dots you'll probably want a good Score

Editor. Check that you can edit notes by clicking and dragging. If your main aim is to print scores you may be better off with a dedicated scorewriter. Having said that, my recommendation would be for a sequencer with good scorewriting facilities such as *Notator* or *Cubase Score*. Check that the package includes a driver for your printer.

If your knowledge of music notation is limited you may prefer a grid or piano roll editor where notes are shown as oblongs against a piano keyboard. Also, a drum editor can help you build up drum patterns. A nice extra is a graphic controller editor which shows controller data in a graphic format.

• Quantisation. Avoid sequencers that only offer full quantisation which pulls notes *exactly* onto the beat. This is fine for some Dance and Techno but to avoid a robotic feel you need a partial quantise function that only

moves notes part of the way towards the beat. Check if you can quantise a selected group of notes rather than the whole track.

Does quantisation physically alter the data? It's better if quantise is only applied during play-back so you can always get back to the original recording.

Some sequencers have a groove function that forces notes into a preset quantise pattern. These can make a pattern swing, shuffle or play in various other rhythmic patterns.

- Processing facilities. These let you perform functions such as making notes legato or staccato, creating volume and tempo changes, thinning continuous controller data, and transforming one kind of MIDI event into another. Cubase's IPS (Interactive Phrase Synthesiser) lets you modulate and process music data.
- System Exclusive Data. Not all sequencers support this and of those which can, not all let you edit it. Is this important to you? If you want to play third-party MIDI files, it's essential.
- Support for Standard MIDI Files. Another essential. Rare is the sequencer that can't read SMFs but can it write both Format 0 and Format 1? You may need Format 0 files for your MIDI File Player.
- Synchronisation. Most sequencers support MIDI Clock but do you need SMPTE or MTC support for any of your other equipment?
- Upgradeable. Is the developer still updating the program? Can you upgrade to a Falcon version or one that supports digital audio (this really only applies to Cubase Audio and Notator Logic Audio). Some companies even offer cross-computer upgrades.

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Günter Minnerup starts a new series on good page design with a desktop publisher...

obody would seriously claim that the invention of word processing has done much to improve the quality of writing: indeed, most masterpieces of world literature were composed on old-fashioned mechanical typewriters or even, perish the thought, by the positively prehistoric method of dipping a pen into ink and carefully scratching a wood pulp surface! Now that we do have the likes of Protext and Papyrus, even the marketing people at Arnor and HiSoft wouldn't suggest that using their software gives you the slightest artistic headstart over someone using a plain, public domain text editor. Tools are tools, and art is art.

Much the same applies to desktop publishing and good page design. Put a novice in front of the most feature-packed, multi-coloured whizz-bang DTP system and you'll probably end up with the most

Viewing pages at a distance, or greatly reduced, makes it easier to judge their overall balance. Try to look at them as paintings or photographs rather than text.

simple and can be learnt by everyone, at least to the point where the output no longer violates basic rules.

Once again, the analogy with writing is instructive: not everyone can become a great literary genius but, with a little effort, we can all master the elementary rules of grammar and syntax to become competent writers.

beginners fall at the first hurdle by giving in to the urge to fill every square inch of it.

Just walk into the nearest bookshop and compare books of different price ranges: cheap paperbacks, for example, with classy, expensive-looking volumes of the "coffee table" variety. The former will have lots of text crammed onto their pages, whereas the latter "waste" much of their glossy art paper by leaving it blank. Wide "luxury" margins, the generous deployment of white space around headings and illustrations, and liberal line spacing all signal that this is a publication ruled by aesthetics not cost. So when you embark upon your DTP project, a good rule is to start by thinking not about how much you can cram into a page and what fonts and illustrations to use, but which areas of the page you are going to leave untouched.

It is all a question of proportion, of course. When we read a book or magazine, we naturally concentrate on the detail - the words, sentences and illustrations. To learn about page design, take the opposite approach: hold a well-designed publication a good distance away from your eyes, squint a little so that the text and pictures become blurred and study the overall balance between white and grey, printed and blank areas. Then try to reproduce these proportions in your DTP program, substituting filled boxes for text columns and illustrations. An evening spent this way will soon give you a feel for what constitutes a well-balanced page, and after a few such practice sessions you will soon be able to define approximately correct margins and columns for almost any conceivable page dimensions intuitively. You will then be ready to study the simple science of well-proportioned page design in more precise, "scientific" detail.

Next month – golden rules and rectangles...

BETTER BY DESIGN

appalling jumble of fonts and graphics you have seen since your friendly neighbourhood builder last pushed a promotional leaflet through the letterbox.

By contrast, a skilled and experienced page designer can knock up smart-looking, professional output using nothing more sophisticated than a twenty quid GDOS graphics program running on an unexpanded 520 ST with a single-sided disk drive. No need to get depressed and sell your copies of Calamus or DA's Lavout. though.

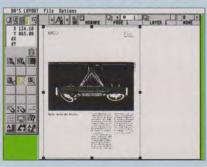
It would be far more depressing, in fact, if quality page design did depend on equipment far beyond the budget of the average punter. But this is not the case. The principles of good lay-out are in reality quite

SPACE CRAFT

If writing is about words and sentences, page design is about space and contrast. The available space is provided by the physical size of the printed page, and the most elementary contrast is that between printed and unprinted areas of the page – usually, if we ignore the effect of colour for the time being, between black and white.

One of the main reasons why the expert with a budget set-up will produce more pleasing pages than the beginner with a professional power system is that the expert will make good use of a key "feature" provided by even the cheapest program: white space. White space is what you always begin with, and most hopeful

Magazine adverts are often the best examples of the clever use of white space. They have to be, given the page rates charged by the top magazines!



DATE SATISFY DELEGATION OF THE PROPERTY OF THE

The hard copy may not show this but behind every well-designed page lurks a precise symmetry of grids, guides and diagonal sections – even in asymmetrical page layouts such as this one...

TRUE TO Type

Andrew Wright kicks off a new series on practical typography and the world of fonts...

n the last year or so the Atari world has seen an explosion of interest in fonts and typefaces. It isn't too difficult to see why, with scalable type handlers like *SpeedoGDOS 5* and *NVDI 3* on the horizon, outline font DTP programs like *Calamus* and *Pagestream*, and perhaps most important of all, the rapid drop in the cost of the typefaces themselves.

A few years ago, you had to pay upwards of £30 for a single font unless you bought in bulk – a thousand or so with a 100Mb hard disk thrown in for nothing! Now, it's relatively easy to buy a couple of font packs as a good solid base for desktop publishing. Now and again you might need alternatives but they can often be bought for far less than £30 and there are hundreds of freeware and shareware fonts available from PD libraries which can often fit the bill

Of course, this increase in availability can only lead to confusion. Many of you will be experts at using Swiss

and Dutch with *Timeworks* or *Easy Text*, but do you know the optimum leading for Perpetua or Bookman? Can you tell your Zurich from Swiss or Helvetica? And just what has stress got to do with it?

In this page, I'll try to offer good, practical advice on how to make the most of your newly-acquired type-faces and how to install them and use them inside various applications. Over the next few issues I'll be exploring the way fonts work with real applications and showing you how professional designers use different typefaces. But for this month, let's look at typeface terminology.

POINT TO POINT

Figure 1 shows the main elements of a typeface to which I'll be referring from time to time. One thing missing from the diagram is the **point** size. This may appear to be a critical measurement but it is very hard to define. It started life as the height of the metal block that was used to print each character. Now it is a rather nebulous measurement that includes some white space above the ascenders and below the descenders.

It certainly isn't the height of the capital letters or even the KP distance, though most type scales (transparent plastic cards available from most good stationers) measure the former and make an educated guess. For most Monotype-designed faces, the point size is equal to the KP distance plus about 7% but other type foundries use different methods.

From the practical desktop publishing point of view it matters very little though it is vital to understanding typography. If you select 12 point text in *Calamus*, *DA's Layout* or *Pagestream*, for example, the distance between the top of an ascender (or any other reference point) on one line to the top of the ascender on the line above or below will be exactly 12 points – or 1/6 inch because a point is 1/72 inch.

Figure 2 shows some aspects of type terminology that are important in classifying or describing typefaces. **Serifs** can be either bracketed (containing a curve) or unbracketed, slab or hairline, and can also be either horizontal or diagonal.

Stress is an important feature that can affect legibility and the quality of printed output, particularly on low-end printers. Stress, which was originally created by pen nibs in the days before hot metal typesetting, is the variation in the thickness of the strokes of each character. Some typefaces, like Bodoni, have a very pronounced stress while others have very little and the angle of stress varies from the vertical to almost 45 degrees on some faces.

Figure 3 shows a selection of typefaces at the same point size and demonstrates the variation in relative Abg Abg Abg

Figure 3: variations in serif type design - from the top down: Fenice, Bookman and Centaur.

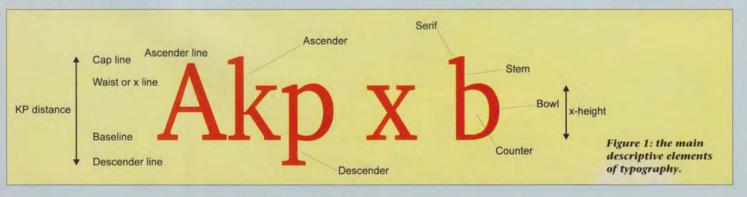
heights of capitals and the x-height. By now you should be able to make some observations about all the featured typefaces, including the serif types, amount and angle of stress and relative x-heights. Next month we'll put this new-found knowledge to good use.

WHAT'S IN A NAME?

You may well be wondering just what typefaces you have available. With an outline font program like *Calamus* or *Pagestream*, of course, the world's your oyster as you have access to entire ranges of professional fonts as well as PD or shareware ones.

If you're using Easy Text Professional or another GDOSbased package, you won't have the same range. Atari originally licensed two Bitstream fonts for the Atari, namely Swiss and Dutch. Swiss equates directly to Helvetica while Dutch equates more or less to Times Roman. Some names lead to a lot of confusion, particular names with an Alpine flavour - Calligrapher users should note that Zurich, for example, is another name for the Linotype typeface called Univers, and not Swiss or Helvetica!

Figure 2: serifs (from the left, slab, bracketed and hairline) and a letter "o" showing pronounced angled stress - two elements of the typographer's fingerprint system.



JUST THE JOB

Starting up in business is definitely not straightforward when it comes to getting advice. As a close friend who is currently showing entrepreneurial flair commented: "These days, you get advice on where to go to get the best advice on getting some advice."

This was her introduction to a complicated tale about how she went to her local Enterprise Trust only to be referred to her local county council economic development and employment department which advised that the local TEC (Training and Enterprise Council) was the best bet. There was also a suggestion that the regional DTI office might be the best starting point...

Eventually, the prospect of a grant reared its rather appealing head, but there was one more barrier between this lady and the money she felt could help her create and market computer-based tutorials – the dreaded profit and loss and cashflow projections for the first two years of the new business.

Now this is definitely not my introduction to an idiot's step-by-step guide to building a spreadsheet, where all the figures are cut and dried and the success of the exercise is a foregone conclusion. Oh no. You will never create spreadsheets showing a reasonable projection of your business finances without doing detailed research first, and that's the message of this piece. The real work is in the preparation, the quality and reliability of the information about who allows what credit, discount

Step-by-step guides to spreadsheets may not help you but intelligent research and your ST will. Richard Williams advises on the best way to figure it out...

The gutsy part of any cashflow spreadsheet

- the bottom part that deducts expenditure from income, adds the existing bank balance and tells you what you're likely to have in the bank at the end of every month.

Getting this part wrong spells disaster!

0 A	27: 'Sundry expe	enses"					
	A	8	C	D	E	F	6_
25	Stationery	108.88				154.88	
26	Office equipment	275.88		475.88			
27	Sundry expenses				56.60		71
28							
29	TOTAL OUTGOINGS	386.58	356.50	486.50	68.18	165.58	84
38	*************						
31	'Met inc less out	1918.50	-51.58	-181.58	236.98	139.50	226
32	Bank balance b/f		1918.50	1867.00	1685.58	1922.40	2861
33					*******		
34	Closing balance	1918.58	1867.88	1685.58	1922.48	2861.98	2287
61							0

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0 0	A	8	Ť	0 0	A	В	
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It's useful to be able to open your profit and loss and cashflow spreadsheets side by side and copy shared information from one to the other. Microdeal's 3D Calc lets you open several worksheets simultaneously.

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INTO THE MIRE

So, firstly, the **Profit and Loss** spreadsheet. This shows income and expenditure based on sales and payments for each month of the year. However, no account is taken of when the income is actually received and payment goes out. For instance, sales you make in December may not be paid for until February the following year, and your packaging supplier may wait three months for the vinyl cases you received today.

The Cashflow spreadsheet shows in which month money comes in and goes out – the bottom line is a reflection of what you actually have in your business account.

Never study cashflow and profit and loss spreadsheets for the same

business in isolation. A P&L sheet may paint a marvellous picture for year end while the cashflow sheet may show a thumping great mid-year loss which the business cannot possibly survive! You have been warned. Most businesses go under for cashflow reasons, with

a sad proprietor clutching a piece of paper that proved how everything would have been fine by autumn...

Be smart: avoid step-by-step guides to spreadsheets like the plague.

And my friend in the computer tutorials business? She decided that she didn't need any help as she had most things she needed – especially as most of the advice agencies just seemed keen on advising about where to get advice. But she produced some honest spreadsheets which showed that dedication would lead to success.

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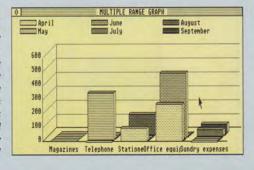
available for buying in quantity, cost of loans, accurate pricing and other questions unique to your particular business.

If you can do all that, put it into a word processor or database file and then do some fairly simple maths to work out where you need which formula, and which cells it takes its

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Sometimes it helps if you open the same spreadsheet in two different windows and scroll to two non-adjacent parts that relate to each other in some way...

Graphs can give you picture of where your income is going to, but don't expect the bank manager to be impressed. They're more interested in your worksheets and the potential they show for your business!



In 3D Calc, turn off "autocalc" to see the formulas in the cells, rather than the results. This can be useful when tracking down an error – and make things faster when you're inputting figures.

data from, you will have something invaluable to your firm: profit and loss and cashflow spreadsheets that reflect the *real world*. If the figures don't look promising, you have two choices: make changes like finding alternative suppliers and charging different prices if the market will stand them, or forget the whole thing. At least it won't have cost you much at this stage.

Here I'll explain the vital difference between profit and loss and cashflow. The rest you will either already know or can figure out for yourself

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ast time, we parted with another programming challenge – to write a program that reads in a text file, converts it all to capital letters, and then prints it. Take a look at the *Printing* and *Bye Bye* boxes for a discussion of this code and some issues arising from it.

As part of the package of termination functions described in the *Bye Bye* box, the ANSI standard library also includes another related routine that you can use to customise the program termination process. atexit() allows you to specify functions that are to be called as part of the termination procedure. Such routines can be very useful in the development of GEM programs, ensuring that any open VDI workstations are closed prior to program exit.

Up to 32 functions can be registered through atexit() for calling in this way. They are called in order – the last to be registered is the first to

be executed – before exit() closes open files and terminates the program. atexit() routines are only called during normal program shut-down, that is a return from main() or a call to exit(). Invocations of _exit() or abort() bypass this part of the termination procedure. To make use of atexit(), your program should #include <stdlib.h> to obtain the appropriate function declaration.

SLIPPERY STUFF!

Let's have a closer look at the atexit() declaration, as it uses something we have not yet met:

int atexit(void (*routine)(void));

As with most C gobbledy-gook, it looks much more complicated than it actually is. Taking this one stage at a time, it says that **atexit()** is a function returning an int, with a single

argument, "routine". The return value is 0 if all went well, or some other value if the limit of 32 atexit() routines is exceeded. The new bit is to figure out what strange type of variable "routine" is.

From the C that you already know, the "*routine" bit should make you think that it might have something to do with pointers. Also, leaving the asterisk and the surrounding brackets aside for the moment, it looks awfully like a declaration of a function with no arguments and no return values:

void function(void)

Such suspicions are entirely justified: "routine" is a pointer to a function that takes no arguments and returns nothing. So, putting it all together, atexit()'s argument is the address of a function to be called during program termination. The function will not receive any input arguments,

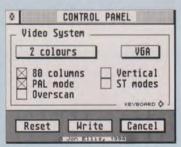
nor will it be expected to return a value. To furnish atexit() with such an address, you simply use the name of the function to be called, without the brackets that normally follow it. So, if we have a function called tidy_up(), it can be hooked into atexit() using the line:

atexit(tidy up);

Of course, there is nothing preventing you from declaring variables as function pointers, and using them yourself. Have a look at Listing 2. This declares "varptr" as a pointer to a function returning an int, stores the address of the function "add_money_up()" in the variable, and then finally calls the function using the function pointer.

The call using the function pointer is easy to work out: if "varptr" is a pointer to a function, then (*varptr) is a function. The brackets around

EXIT STAGE LEFT...



Function pointers are used in programming CPX modules for Atari's XControl.

Now that your C program can read a file, what happens when you quit?
Jon Ellis explains all...

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BYE BYE!

So far, we have only met one way to stop a C program: to return from the main() function. It is not always convenient or structurally neat to do this though. For example, say a fatal error occurs in some function three or four levels down in a program. To have it flag the error, and then for control to wend its way back to a return() statement in main() could be complicated. Fortunately, C provides three ANSI library functions:

exit()

This is the most common way to terminate a C program prematurely. When exit() is called, all open files are fclosed(), all temporary files deleted and the C environment shut down gracefully. The function accepts a single integer argument which is passed back to whatever started the terminated program. This value is traditionally used to indicate whether the program has ended successfully or in failure. The header file that declares a prototype for exit(), stdlib.h, also contains definitions for standard return codes EXIT_FAIL-URE (3) and EXIT_SUCCESS (0). These values can also be used in return statements from main(). Calling exit() is a one-way ticket – it never returns.

exit() is a fundamental part of all C programs, whether or not it is called explicitly. The start-up code (in the case of *Prospero C*, that contained in *FIRST.O*), invokes main() and also uses exit() to tidy everything up and end the program. Think of the start-up code as doing something like this:

result = main(argc,argv);
exit(result);

exit()

Normally, a leading underscore in a function name indicates that it is a function used internally by the C library, and not one intended for general use. _exit() is a partial exception, in that it is fully documented. _exit() terminates the program in the same way that exit() does, except that it does not close all opened files first. For this reason, its use is rare, being limited to occasions when an *immediate* termination is required. _exit() accepts a single integer argument which has the same purpose as exit().

abort(

The final standard termination method is **abort()**. The function takes no arguments, and so is the least flexible of the set. The ANSI standard implementation of **abort()** causes the text "Abnormal program termination" to be printed on the screen, and the program to be terminated via _exit() (without closing files). The *Prospero C* version of **abort()** does not print any text.

this expression are required because getting the value addressed by a pointer (a process known in techno babble as *dereferencing* the pointer) is a lower priority than doing a function call.

Miss the brackets out, and the compiler will assume that you are trying to invoke a function named "varptr", which returns some kind of pointer that it then needs to dereference. All manner of type conflicts ensue, and you can play "guess the error message" for hours!

Though the example above is rather contrived (we could have just written wedge=add_money_up();), there are occasions when function pointers are required. These include situations like that with atexit(), where a library function needs to make a call back into your own code, and in the implementation of low-level structures like jump-tables. Jump-tables feature prominently in CPX programming.

A word to the wise: function pointers are one of C's trickiest constructs, and one of the easiest to crash the machine with. Forget to initialise one of these variables before using it, and a multi-bomb crash is guaranteed. Likewise, trying to do arithmetic on a function pointer is also unlikely to be helpful.

If figuring out some of the declarations required to use function pointers seems hard, you could always use CDECL, the C declaration utility given away on the October issue cover disk.

Finally, just to fix the ideas of function pointers and atexit() in your mind, this month's programming challenge is to rewrite Listing 1 using atexit() to allow you to dispense with all calls to the terminate() routine. Also, figure out what this declaration means:

```
void qsort(void *base,int n,
int size,int (* compare)
(void *,void *));
```

Answer next time...

```
LISTING 2
void tot_up(void);
int add_money_up(void);

void tot_up(void)

{
   int (*varptr)(void);
   int wedge;

   varptr = add_money_up;
   wedge = (*varptr)();
}

int add_money_up(void)

{
   return(1000);
```

PRINTING

As usual in C, there are many ways to solve a programming problem. Listing 1 shows one implementation of our *UCPRINT* program.

The structure is simple enough: the text file specified on the command line is opened for input, and the printer opened for output in text mode, both using fopen(). Next, characters are read one at a time from the text file, converted to upper case using toupper(), and sent to the printer by fputc(). This read/convert/print loop goes on until the input file is exhausted, when fgetc() returns EOF. Both files are then closed by fclose().

If you have a cut-sheet printer like a laser or inkjet, you may want to have the printer eject the sheet containing the final few lines of text

To do this, simply add a line sending a form-feed character to the code after the loop, say between the two fclose() calls. Something like:

```
fputc('\f',prfp);
```

should do the trick.

The listing introduces another feature of the standard C library. This is contained within the function terminate() which is used to handle error conditions. Most of the code is stuff you have already seen – terminate()'s argument is a string that is printed on the screen and followed by a wait for a keypress.

The novelty lies in the final line: exit(0);. This is a call to a library function that ends the C program, with the effect that calling terminate() is a one-way trip.

The role of exit() is rather like END or STOP in BASIC. See the *Bye Bye* box for more details on termination functions.

```
LISTING 1
** Program to read in a text file,
** convert it to upper case,
** and then print it out.
** by Jon Ellis, 14 September 1994, ST Review 33
#include <ctype.h>
#include <stdio.h>
#include <stdlib.h>
int main(int,char *[]);
void terminate(char *);
** The program starts here...
int main(argc,argv)
int argc:
char *argv[];
  FILE *infp, *prfp;
  int c;
  if (argc != 2)
        terminate("Usage: ucprint <filename>\n\n");
  if ((prfp = fopen("PRN:","wa")) == NULL)
        terminate("Cannot open printer device !\n");
  if ((infp = fopen(argv[1],"ra")) == NULL)
        terminate("Cannot open input file !\n");
  printf("Printing file %s\n",argv[1]);
  while ((c = fgetc(infp)) != EOF)
        fputc(toupper(c),prfp);
  fclose(infp);
  fclose(prfp);
  printf("Printing finished successfully\n");
  printf("Press RETURN to exit: ");
  getchar();
  return(0);
** Function to handle program termination.
** The argument is a pointer to a
** string to be printed on stdout.
** The function never returns, using
** exit() to end the program.
** Usage:
                terminate(message);
**
**
                         void terminate(char *);
*/
void terminate(msg)
char *msg;
  puts(msg);
  printf("Press RETURN to exit: ");
  getchar();
  exit(0);
```

Ofir Gal continues with his text file viewing program...

WINDOW

ast month we ended up with a simple program that opened a window and displayed a text file in it.

But only the first few lines of text were visible as the program did not support any scrolling, moving or resizing. This month we take the plunge into one of GEM's most difficult concepts – window handling.

COMMUNICATION

For a program to allow window operations such as scrolling, moving and resizing, it must be constructed using an event loop, similar to the one we used in previous GEM tutorials. The main loop of the program should consist of an evnt_mesag call and each received message should be dealt with accordingly.

GEM generates a number of messages (listed in the *Window Messages* table) depending on a user's actions. It is best to define these values as constants and use their names in the program. The file *AES.BH* on the cover disk includes these definitions.

When a window message is received the appropriate action should be taken. The most simple example is to quit the program when the user clicks on the close box at the top left corner of the window. A simple example is shown in listing 1.

MOVEMENT

The next message type we need to deal with is WM_MOVED which is generated when a user clicks and drags the move box at the top of the window. A common programming mistake is to redraw the window contents which is not really necessary.

If a redraw is required then GEM



This image illustrates the intersection of two rectangles, the yellow one being the intersection of the blue and red ones. Of course, this isn't the only way that two rectangles can intersect...

will generate a specific request in the form of WM_REDRAW. The only action required as a result of WM_MOVED is to move the window using FNwind_set, an AES call that takes six parameters. The first is the AES window handle, then the function code followed by the new coordinates. The function code for moving the window is 5. Later in the series I will cover the full function list for FNwind_get and FNwind_set in detail, but for now, take a look in the box explaining the basics of these two important AES calls.

When GEM sends a WM_MOVED message, it fills the mess() array with the required values. mess(0) contains the message type, mess(3) contains the window handle that is required for the wind_set call and mess(4) to mess(7) contain the x, y, w and h coordinates of the new position. A simple example is shown in listing 2. Try running this example program and move the window around the screen.

```
LISTING 2
'handle window moving
DEFINT a-z
LIBRARY "gemaes"
'$option k50,y
'$include aes.bh
DIM mess(7)
                 'create message buffer
DIM SHARED junk
SUB WinMessage
SHARED mess()
STATIC message
message=mess(0)
SELECT CASE message
  CASE WM_MOVED
     junk=FNwind_set(mess(3),5,mess(4),mess(5),mess(6),mess(7))
END SELECT
END SUB
'open a small window
WINDOW OPEN 1, "TestWindow", 50, 50, 200, 100, 4095
  evnt_mesag VARPTR(mess(0))
  IF mess(0)>=WM_REDRAW and mess(0)<=WM_MOVED THEN CALL WinMessage
  FND TF
LOOP UNTIL mess(0)=WM_CLOSED
```

RESIZING

Resizing a window is almost identical to moving it from a programming point of view. For now, modify the sub-routine WinMessage and replace CASE WM_MOVED with CASE WM_MOVED,WM_SIZED so that both type of messages are dealt with identically. Later you will see that there is a subtle difference between the two.

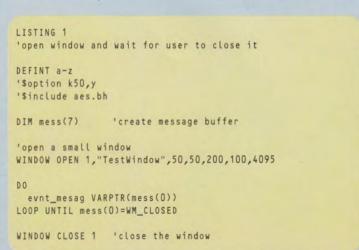
WINDOW CLOSE 1 'close the window

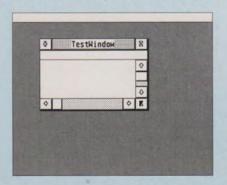
Add the resizing code, run the program and move and resize the window. You will soon notice that while resizing the window works, parts of it quickly become the colour of the desktop and your window fills with "holes" and looks a real mess. This is because your program needs to

redraw those "holes". If the window contained text, the text would have to be redrawn. For the moment, draw a white rectangle. The correct routine will be developed over the course of this series.

REDRAW

Redrawing GEM windows is the part many programmers get wrong, especially if they are not familiar with the workings of GEM. When a redraw message is generated, the AES sends the coordinates of the required redraw area. The window handle is passed in mess(3) while the coordinates are passed in the same way as with other window messages. A





The test window created by the program in listing 1 can be closed by clicking on the Close box at the top left corner.

SHOPPING

WINDOW MESSAGES

Value	Name	Meaning	Cause	Action
20	WM_REDRAW	Window redraw	Various	Redraw window contents
21	WM_TOPPED	Window topped	Various	Bring window to top
22	WM_CLOSED	Window closed	Close box clicked	Close window
23	WM_FULLED	Window fulled	Full box clicked	Maximise window size
24	WM_ARROWED	Window arrowed	Scroll arrow clicked	Scroll window contents
25	WM_HSLID	Window hor, slider	Hor. slider action	Scroll window contents
26	WM_VSLID	Window vert. slider	Vert. slider action	Scroll window contents
27	WM_SIZED	Window resized	Size box action	Resize window
28	WM_MOVED	Window moved	Move box action	Move window

rudimentary redraw routine should first obtain the dimensions of the window using *FNwind_get* and then find the intersection of the window and the required redraw area. *FNwind_get* takes the window handle and the function code 4 this time.

Calculating the intersection of two rectangles is easy in *HiSoft BASIC* which has a built-in intersection routine. The call is part of the GEMAES library and takes no less than 12 parameters! The first four contain the coordinates of the first rectangle while the second set of four holds the coordinates of the second rectangle. The call then places the coordinates of the intersecting rectangle in the last four parameters. The resulting

rectangle is then clipped and a white rectangle drawn. This is shown in listing 3 in the sub-routine called WindowRedraw along with the modified WinMessage routine. Don't forget to add the "gemvdi" library at the top of the code.

If you run the program now you will find that it redraws the missing parts as you resize the window or move it off the right edge of the screen. The redraw code we are currently using is simple and appears to work, but it's not perfect. Under certain conditions, parts of the window that need redrawing will be left "dirty" while clean parts will be redrawn without any reason. This will be covered next month's

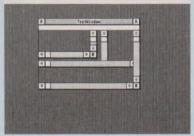
GET AND SET

FNwind_get and FNwind_set are two crucial AES calls designed to simplify the use of windows under GEM. The calls are identical in format and each takes six parameters: the AES handle of the window, a special function code and the four window coordinates. The only difference between the two calls is that one is used to force a window action such as resizing, while the other is used to ask GEM about the window.

As usual, the values for the function code are defined as constants in the AES.BH file on the cover disk. The names follow the GEM convention and are much easier to remember. The table below lists the various values of FNwind_get/set(VAL win,VAL fcode,x,y,w,h), their standard constant name and their use. Note that some of the codes only apply to FNwind_get.

This list is by no means complete but covers just about all you need to know to create a GEM program. We'll go into more detail on the various options later in this series.

Code	Name	Function	Action
4	WF_WORKXYWH	Get	Returns the current work area of the window
5	WF_CURRXYWH	Get/Set	Returns/sets the full size including borders
6	WF_PREVXYWH	Get	Returns the full size of the previous window
7	WF_FULLXYWH	Get	Returns the maximum possible size including borders
8	WF_HSLIDE	Get/Set	Returns/sets the position of the horizontal slider in x
9	WF_VSLIDE	Get/Set	Returns/sets the position of the vertical slider in x
10	WF_TOP	Get/Set	Returns/sets the handle of the top window
11	WF_FIRSTXYWH	Get	Returns the first rectangle in the list
12	WF_NEXTXYWH	Get	Returns the next rectangle in the list
15	WF_HSLSIZE	Get/Set	Returns/sets the size of the horizontal slider relative to the scroll bar
16	WF_VSLSIZE	Get/Set	Returns/sets the size of the vertical slider relative to the scroll bar



Moving and resizing the window can create this effect. The AES does not redraw newly exposed areas of the window for you.

```
LISTING 3
'handling redraws - version 1
'requires the GEMVDI library

SUB WinMessage
SHARED mess()
STATIC message
message=mess(0)
SELECT CASE message
    CASE WM_MOVED, WM_SIZED
        junk=FNwind_set(mess(3),5,mess(4),mess(5),mess(6),mess(7))
    CASE WM_REDRAW
        WindowRedraw mess(3),mess(4),mess(5),mess(6),mess(7)
END SELECT
END SUB
```

SUB WindowRedraw(VAL win,VAL rx,VAL ry,VAL rw,VAL rh)
STATIC wx,wy,ww,wh,x,y,w,h
'obtain work area of window
junk=FNwind_get(win,4,wx,wy,ww,wh)
'find intersection of the required redraw
'rectangle and your own window
Intersection rx,ry,rw,rh,wx,wy,ww,wh,x,y,w,h
'must set the VDI clipping
vs_clip 1,x,y,x+w-1,y+h-1
'colour white
vsf_color 0
'draw rectangle
vr_recfl x,y,x+w-1,y+h-1
END SUB

MISSED THE FEBRUARY ISSUE COVER DISK WITH K-RESOURCE? No problem – just

No problem – just turn to page 98 for information on how to order back issues.

Want to send a message across the world? Graeme **Rutt and Mark** Baines look at the electronic option...

elcome to the future postal service - the electronic mail (e-mail) system on the 'net. It enables you to send a message to any one of your 25 million (or so) Internet brethren and there is no other Internet function that's closer to the ideal - connectivity, co-operation, communication.

E-MAIL VIA CIX

Sending mail via CIX is a straightforward task and the process is exactly the same whether you are sending a message live (not advised) or through the rather wonderful Cixcomm/Cixread off-line reader (very much advised!).

Enter the mail system by typing mail, type to followed by a valid mail address, subject followed by a subject of your choice and then write your message. If you're on-line, you

MAIL IN THE '90s

get to use a rather tacky line-editor; if off-line, you'll either use Cixread's full-screen editor or an external editor of your own choice.

Once you've finished writing your message, type send to send it. You can even send someone else a carbon copy of your message by typing cc, or abort the message transfer by typing quit.

E-MAIL VIA DEMON

The mail system on Demon is run by a NOS function called "SMPT". Thankfully there is no need to go into the gory details of setting this up as it should already be done for you in the NOS start-up package. You should always send mail off-line using the Mailer program - just hit B from the DEMON. TOS menu.

From here, type m [user-name]

CIX Version 2.19 82/88/94 copyright (c) CoSy Conferencing System, University of Euelph, 1984 for inon copyright (c) Copyrink Information eXchange Ltd, 1985-1994 fow are on line: MF/MFFF (c)change? (Enter 'new' for new user) sabbath ckhamer (there has ussword: un have B file(s) in your private subdir. sc space occupied * 344k. un are a member of 53 conference(s). IX nou configured ready for CixComm abbath@leprosy.demon.co.uk subject: talking to yourself message. End with '.CP2' egards . You end/action:send

Writing a message on-line to CIX with the line editor - yeuch!

... and now writing a message off-line with an external editor.

700 AM SALE COME THE THE REST COME TO SALE C

Sending a message in Cixread, the off-line part of the Atari off-line reader for CIX.

	Сінгеад 3.4.58	
dominic.zip	24883 Sep 15 14:13 94	
dominic.zi~8	24883 Sep 15 14:13 94	
honemop2.gif	4175 Sep 7 19:88 94	
nac.ttp	74172 Sep 19 16:32 94	
papmult.lzh	1496 Sep 18 86:43 94	
usnarket.zip	19548 Sep 13 88:28 94	
H.Zip	5974 Sep 22 88:38 94	
You have 12 nessage	s marked for further attention.	
Rain:mail		
ou have 12 message	s marked for further attention.	
heil:dir		
Online binmail dire	ctory at 88:34:34 on 22/89/94	
Description	Size Time Created/Modified	
********	**** *****************	
aa-13959.gif	193696 Sep 19 19:48 94	
dominic.zip	24883 Sep 15 14:13 94	
dominic.zi~8	24883 Sep 15 14:13 94	
homenap2.gif	4173 Sep 7 19:88 94	
nac.ttp	74172 Sep 19 16:32 94	
papmult.lzh	1496 Sep 18 86:45 94	
usnarket.zip	19548 Sep 13 88:28 94	
и. гір	5974 Sep 22 88:38 94	
Mail:to		
To: president@white	house.org	
Subject: Haiti		

ETIQUETTE

CinRead System Files Mailbones Remos Info Risc

- When you're writing an e-mail message, try to imagine that you're talking to the recipient face to face. Treat them with all the normal courtesies you would in vocal communication - unless you don't want to, that is!
- · If you receive abusive e-mail from someone else, is it really worth biting back? Only you can judge this. I always do my best to ignore it and try to avoid such people in the future.
- If you must write an abusive message, for whatever reason, beware that the system administrator at either end of the mail chain may take exception to your message. They are unlikely to take your reasons for writing it into consideration...
- Always remember that when dealing with the barren land of bare-text communications, your words can be taken the wrong way. Try to write as clearly as possible but expect to be occasionally misunderstood.
- In the bare-text wasteland there is nothing like sarcasm or the odd leg-pull to make the recipient misunderstand what you're trying to say. To help you out some kind person :-) developed the Smiley, which I don't like :-(- in fact, I reckon he was a bit of a you-know-what ;-). I think you get my drift - although I also use stuff like [g] for grin or [s] for smile.

followed by your message in whichever editor you've set up in NOS. Follow the prompts to send or abort.

TEXT AND PICS

There is no easy method of sending files to another Internet user. You cannot, for instance, just include a clipart file in your text message and hope that the recipient will get it in one piece. The problem is that much of the Internet only handles 7-bit ASCII characters while most files use 8-bit data.

To resolve this problem, UUEencoding has been developed. This effectively takes an 8-bit data file and translates it into a 7-bit ASCII text file. You can then include this with your mail message and send it to whoever you wish, although they will require a UUE-decoder program at their end to unscramble the file into its original form.

ESSCode is the best UUE program for the Atari. It's fully compatible with the UUE system and is very easy to use. It even lets you automatically split your UUE-encoded file into lumps of a pre-determined size, occasionally necessary for some sites that have a mail size limit.

FINAL WORD

That, in a nutshell, is e-mail - a fast, economical way of getting messages and data from one person to another. Once you start using it you'll wonder how you ever got by without it, supplanting most of your letter writing and a great deal of voice telephone messaging. E-mail is the reason for getting into the 'net. Next time we'll be looking at methods of finding people on the 'net...



ESSCode - a UUE encoder/decoder for the Atari. available on most decent bulletin boards.

Perhaps the most important feature of the *Internet* is the ability to send personal and private messages to another person. E-mail is fast, not as immediate as a telephone call, but it does give you time to think about messages before committing yourself.

E-mail works in the same way as the postal service. You address a message to someone and the Internet routing software takes care of sending it on from one computer to another until it reaches its destination. All the relevant information is contained in the mail header, such as the To:, From: and Subject: fields just like a company memo. As it passes through each system, their address is appended to the routing information which may help you if it doesn't arrive. If it has to pass onto another mail network then it gets passed on through a gateway, just like a letter would to another country's postal service. In essence all you need to know is the recipient's address and leave the rest to the Internet

BEHIND THE SCENES

ADDRESSES

The Internet is divided into domains (see the Internet Domain box) which is mostly US-based. Non-US addresses also use the top-level country domain code at the end, such as "uk" for United Kingdom or "de" for Germany. If no country code exists, assume that the site is in the US.

The "uk" domain has various sub-domains, the two most common being "ac" for an academic institution (Imperial College is ic.ac.uk) and "co" for a commercial organisation (CIX is compulink.co.uk).

You can see that the address is hierarchically written in a top-down manner, so that the root is on the right. The address cix. compulink.co.uk points to the UK domain, the commercial company sub-domain, the particular company

Compulink Information eXchange Ltd and its host computer called cix.

Each computer can have many users and so to address a particular user you use that person's "login name" separated from the node address by a "@" character (meaning "at"). So, my Internet address is msbaines@cix.compulink.co.uk where I am identified on that computer system as msbaines, a name unique to me at that site.

Some people use a network that has its own internal addressing system which isn't compatible with the *Internet* standard. For instance, someone at *CompuServe* might be known by the anonymous address 100326,5853. Most of these networks have set up their own gateways that translate *Internet* addresses into their internal format and vice versa so that you can now

send e-mail to almost anyone on any network.

SIGNATURES

Sometimes e-mail won't get through because a system is down or the address was wrong. These messages will be bounced back to you, the equivalent to the Post Office's "not at this address". It is a good idea to include alternative contact points in an e-mail and traditionally these go at the bottom as a signature. 'Net etiquette says that a signature should have a separator of two "-" characters and be no longer than four lines. Most mail software can be set up to contain this signature in a file which is appended automatically for you.

Full details about the format of text messages can be found in the *Internet* RFC paper number 822.





INTERNET DOMAINS

arpa: ARPAnet (now extinct)com: Commercial organisation

edu: Academic institution

gov: Government body

int: International field used by NATO

mil: US Military site

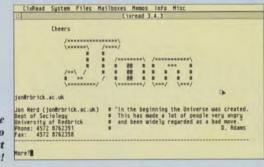
nato: NATO field (being replaced by int)net: Gateway computer between networks

org: Non-profit, private organisation

CixRead System Files Hailboxes Memos Info Misc Cixread 3.4.3 I won't be around on the 25th, got a course Not another one! Don't you do any work? ;-) but can make the 25th, is that OK? yes, that will do fine. I'll see you around lunch time then, Slainte mhath Mark Mark S Baines * Internet: mshaines@cix.compulink.co.uk * * 1028 ISF * FideRet: 2:259/23.188fidenet.org * * 8862 87 624 * MeST: 98:185/88nest.ftn * * TurboNet: 188:186/8.188turbonet.ftn *

A signature that follows etiquette guidelines and includes other contact points...

... while this one is designed to annoy and start some flames!





Domain: a group of related hosts or sites on the Internet.

Address: an hierarchy of names separated by dots and identifying a particular machine or individual on the Internet.

Mail Header: an e-mail's "envelope" - relevant routing information at the top of an e-mail.

Alias: a shorthand nickname for a full address.

CC: Carbon Copy - sending a single e-mail to multiple users.

Forwarding: sending a received e-mail onto another address.

Send: originating an e-mail from scratch.

Reply: replying to another's e-mail, often quoting sections as a reminder. The software inserts the address automatically.

Bounce: mail sent back to you because the recipient was not found.

E-MAIL HEADERS

A typical e-mail header has the following:

- From the sender's address and date/time received.
- Received the path through which the mail passed.
- Date the date/time the e-mail was sent.
- From the sender's name and address.
- To the destination.
 Subject brief description of message.
- X-Mailer the sender's e-mail program. Lines length of e-mail.



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Awesome 9,9 Bartlehawks 1942 10,9 Bartlehawks 1943 10,9 Bartlehawks 1943 10,9 Bartlehawks 1949 12,9 Cadaver/The Payoff 12,9 Cadaver/The Payoff 12,9 Cadaver/The Payoff 12,9 Cannon Fodder 19,9 Championship Manager 93 16,9 Championship Manager 94 Season Disk 19,9 Championship Manager 94 Season Disk 19,9 Championship Manager 16d of Season 12,9 Chorital 10,9 Calvalisation 12,9 Colonals Bequest 12,9 Cyberson 10,9 Cyberson 11,9 Elitra (Frontier) 19,9 Elitra (Frontier) 19,9 Elitra (Frontier) 19,9 Elitra Charlet 10,9 European Facel	Alien 3	19.99
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Cadave/The Payoff. 12,9 Cansor Coesor 9,9 California Games 2 16,9 Championship Manager 93 50,0 Championship Manager 94 Season Disk 8,9 Championship Manager 10,0 Championship Manager 10,0 Championship Manager 10,0 Championship Manager 10,0 Chornia City 10,0 Civilisation 22,9 Colonel's Bequest 12,9 Colonel's Bequest 12,9 Colonel's Bequest 12,9 Colonel's Bequest 12,9 Colonel's City 6,9 Colonel's Colonel's Colonel's Colonel's City 6,9 Colonel's City 6,9 Colonel's Colonel's Colonel's City 6,9 Colonel's Colonel		
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ASK THE EXPERTS

We're back – and willing to answer almost anything you can throw at us...

THE ORACLE

The five best things you can do for your ST – according to Ofir Gal, that is!

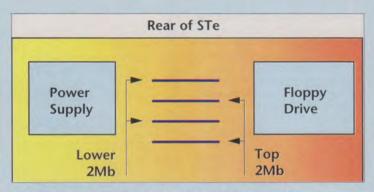
Install NVDI! Forget about Warp9, QuickST and Turbo ST. These were all good for their time, but NVDI means compatibility. With NVDI installed, your ST will feel at least twice as fast and many TOS bugs will disappear.

Text display is at least five times faster and even dialogue boxes will appear on your screen much quicker. NVDI should have been part of TOS, but since it isn't you will have to install it on your boot disk! It works very well with all versions of TOS, MultiTOS, Geneva and MagiC and will bring your ST straight into the '90s.

- Get a hard drive if you can. Prices are falling fast with a fully ST-compatible system now going for £200 or even less second-hand. A hard drive doesn't only mean speed, although it is at least 30 times faster than a floppy disk. It also means that you never need to swap floppy disks before printing with *Timeworks or Calligrapher*. It also gives you the opportunity to use the installed application feature of TOS a swift double-click on a .DOC file can load, say, 1st Word Plus and automatically display your file. The way is also open to install SpeedoGDOS and many other useful utilities that are simply not practical without a hard drive. On the PC and Mac, a hard drive is now considered as essential as a monitor.
- If you are still using a colour RGB monitor with your ST you may like to think about getting a hi-resolution monochrome monitor. The display is much clearer and the resolution is doubled from 640 by 200 pixels to 640 by 400. Support of medium resolution is diminishing and a hi-res monitor is now considered the absolute minimum for the serious user. Among the many advantages of such a display is the ability to place twice as many icons on the desktop and a much more pleasant system font.
- Upgrade your TOS version to 1.04 or later. TOS 1.00 and 1.02 are simply not reliable and have too many bugs to list here. Many of these bugs cannot be solved with Auto programs and can lead to various problems including irrecoverable data corruption. Many programmers specifically state that their programs cannot be guaranteed to run on any TOS version before 1.04
- Install as much RAM as you can afford. Memory prices have fallen so low that a full 4Mb upgrade for any type of ST now costs £99. Having that extra memory can affect printing speed of graphics-based programs like Calligrapher as they use a temporary file when they run out of memory. With more RAM installed this will not occur, speeding up printing times. You could also install a RAMdisk and make full use of the six accessory slots...



NVDI is without a doubt the best utility you can get to improve your system. At £30, no ST should be without it!



Just like that - the STe's SIMMs are in two separate banks...

MEMORY MADNESS

Just after Christmas,
I purchased a 4Mb
upgrade for my
1040STe. I have had an
intermittent fault with the
machine since I fitted the
chips. Now I realise this could just be
a coincide the purchase of the control of t

chips. Now I realise this could just be a coincidence but I have been unable to rectify the problem, and was hoping you could offer some advice.

It does occasionally crash while running, but the biggest problem is when the machine is switched on. It

running, but the biggest problem is when the machine is switched on. It will reach different stages of the "boot" process and will either lock up or reset. Sometimes everything appears fine until the mouse is moved, which then causes another reset. I have disconnected cartridge, joystick, hard drive, printer and second drive and left only the mouse and monitor attached but it still resets!

Ladbroke had the computer for over six weeks (they did warn me there was a four week backlog on repairs) and couldn't pinpoint the fault. They said it only went wrong once or twice and were unable to track down the problem. Can you please offer any help as I am getting withdrawal symptoms from not being able to use my Atari – and please don't suggest putting back my original chips as I gave them away to a couple of 1/2Mb friends!

K. S. Beadle, Essex

It is quite common for a machine to work perfectly for a number of years only to cause problems once it is moved or disturbed. In this case, the problem could be due to one of two things: either the memory is defective or another fault has occurred.

To check the memory, try running a PD memory checker left on overnight to see whether any errors are reported. If not, try removing the top 2Mb leaving in just the bottom 2Mb. If your machine still fails, try swapping

over the 2Mb you removed with the lower 2Mb (see diagram above).

If this still doesn't cure the problem, try checking the power supply as some older supplies can cause glitches if disturbed. Press gently – and very carefully – with a wooden object on the transformer while running to see if the power suddenly glitches.

Failing this, the problem is likely to be with bad contacts inside the machine. Over time, socketed chips collect oxide on their legs. If moved, a poor contact can result causing the kind of faults you describe. The only cure is to remove all socketed chips and to clean and re-seat them. This is a skilled job as there are hazardous voltages around and it's all too easy to bend or snap off a leg – unless you are absolutely sure of your skills, leave this to a pro.

I can certainly sympathise with Ladbrokes – only so much time can be spent on an intermittent fault like this before it becomes uneconomical for both the customer and the repair shop. Paul Rossiter

TRICKY TRANSFER?

I use a PC at work which has a modem attached. Is it possible to use it to download Atari software from BBSs? Using

Procomm, I have joined a BBS and the thought of all that software is making my mouth water!

R. Jayden, Hampshire

The short answer is yes! There are many ST BBSs, most of which carry large numbers of files for downloading.

First of all though, it should be said that it's considered bad etiquette to join a BBS, download loads of files and then never call again – perhaps you could upload some of your own as a sort of "thank you"? Assuming your PC has a 3.5" floppy drive, you will need to format a disk on it to store all the files you download. If your Atari has a 1.44Mb floppy, then just format a disk as normal on your PC by typing "format a:" at the DOS prompt. If you have the more common 720Kb drive on your ST then use "format a: /t:80 /n:9" instead. This tells the PC to format the disk as 720Kb. Some versions of DOS use different parameters with the format command so check the manuals to be sure.

Having formatted a suitable disk, copy the downloaded files onto it. The ST uses a very similar disk format and should be able to read the files directly. We've also included a utility on the cover disk to convert an ST-formatted disk into one that can be read under DOS.

Most files on BBSs are compressed to save space and download time so you may also need to obtain a program to unpack them. The Sysop of the BBS will be able to advise what programs you need to do this. lain Laskey

ON THE SIDE

Is there a program that will make Word Processor and DTP programs print sideways instead for normal so that you could fold the A4 paper to make an A5 magazine?

make an A5 magazine?
Is it also possible to make my

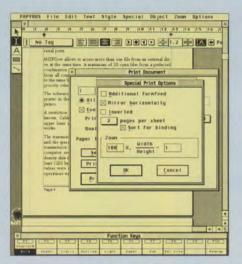
Citizen Swift 240C emulate an Epson FX80 so that ST Calc or K-Spread 2 will print sideways?

F. Edmondson, Isle of Wight

Sideways printing, more properly known as landscape printing, is a function of both the printer (some don't support landscape mode) and the word processing or DTP software being used. You can't get a program that will force printers or programs to do something they weren't designed to do.

Luckily your 240C is quite capable of landscape printing in graphics mode. All you need is some software and it will have to be graphics-based as the 240C doesn't have any resident landscape mode fonts. Most graphicsbased word processors can print this way but trying to set them up to create an A5 booklet is likely to be a recipe for frustration. You can't simply print in two columns as the text won't match when you fold the paper and bind the pages together. Papyrus, however, has the built-in facility to create a multi-page A5 booklet with no hassle at all and comes highly recommended.

The other option is a DTP program. All of the ones currently available will let you print in



Booklet bonus – apart from being an excellent word processor, Papyrus has the facility to print A5-sized booklets...

landscape mode on your 240C
though they don't have direct
support for booklets and you'll
have to work out where each page
should go in relation to the next.
boards that w
scenario – we
Were this h
the SCSI varie

As for Epson FX emulation, it's a no go, I'm afraid. Your 240C will emulate an Epson LQ860, LQ2500 and LQ850 in colour and most other Epson 24-pin drivers, an IBM Proprinter and the NEC P20 in mono. I've never heard of a program that will make it emulate a 9-pin Epson though.

Andrew Wright

MOVEABLE HARD DRIVE

My brothers Compaq PC
has recently expired
but the internal hard
drive seems to be fine.
The unit is a Conner
CP30101G and it has three

connections, one with two rows of 20 small pins followed by a small white connector with three small pins. I think it is a SCSI type. Question is, can it be adapted for my trusty 1040 STe?

N. Kirk, Essex

There are three standards of hard disk that you may come across. Early computers used the now obsolete MFM type of drive (with two ribbon cable connectors) – large, noisy and unreliable. The Atari Megafile 30 and 60 used one of these but they require both SCSI to MFM and DMA to SCSI boards and are of little use nowadays.

Most IBM PC clones built in the last five years or so have an IDE (Integrated Drive Electronics) hard drive with a 40-way connector on the rear. Most of the electronics are built into the drive itself so can be controlled easily and cheaply from a computer. IDE drives are a compromise between simplicity and speed, with capacities between 20Mb and 500Mb readily available. Unfortunately, the electronics required to patch an IDE drive into an ST are not readily available. System Solutions is presently testing a range of

boards that will allow just this scenario - we'll keep you posted.

Were this hard disk of yours of the SCSI variety, it would have a 50-way connector on the rear... Paul Rossiter

SERIOUS USER

Although I have owned my STFM for over five years, I have only recently started looking at it seriously. I wanted something for my business but couldn't justify a PC or Mac, of which I know even less, so the time came to dust off the ST.

However although I feel the potential is enormous, I seem to be floundering in my isolation. Can you help with the following questions?

1. What is the best second drive?
2. Do I have to buy two monitors if I want colour for games and hi-res for business. If so, which do you recommend?

Glad to see your average reader age is 38 – I am only 37. As for the Silica shop in Glasgow, there is hardly any ST support – they told me it's dead!

D. Smith, Dumbartonshire

It's always nice to hear from somebody who has discovered their ST's serious "personality". As for your first question, there's very little to pick and choose between the various second drives on the market; the Zydec from Ladbroke Computing (0772-203166) has a good quality mechanism and should be ideal.

The decision when it comes to monitors is a little hit more complex. Most people tend to use a separate screen for colour and mono work, but some modern "multisyncs" are capable of handling all three screen resolutions - the Microvitec 1438 (again from Ladbroke) springs to mind. The only problem with this approach is that the machine needs to be rebooted when changing between modes and a £20 switchbox is also required. A slightly cheaper option would be to simply buy a good quality mono monitor such as the SM14 from System Solutions (081-693 3355) and use a domestic TV for games.

As for the ST being dead, perhaps some retailers should take a closer look at all the new products in ST Review from time to time... Nial Grimes

SHEET FEEDER!

I own a 520 STe upgraded to 1Mb, with an Epson LQ100 printer. I have had a small but annoying problem with

Calligrapher Professional that came with issue 24; I also used to use Calligrapher Lite and suffered the same problem. Whenever the program is in "graphic text mode" and I print out a document, the printer always ejects a blank sheet before continuing the printout on the next page. Even if it is just a single sheet page document, a blank sheet always follows. I have tried all sorts of possible variations in page length settings without success. This does not happen when the program is in "text only mode". Please help me!

M. Woodstock, Birmingham

This is a known problem with Calligrapher, but fortunately it can be solved by adjusting the paper size parameter. Select the Set Paper Size option in the File menu and click on "Other". Try adjusting the paper size and printing blank pages until Calligrapher stops ejecting additional sheets of paper. The page length parameter

Out you go
- to stop
Calligrapher
causing your
printer to
eject blank
sheets of
paper, adjust
the physical
paper size
from this
dialogue box.



that you have been trying controls the portion of a sheet that Calligrapher actually uses to print to – it does not control the physical paper size. Ofir Gal

PERPLEXED PC

I am interested in carrying out some hardware additions to my set-up, but I have a few queries:

1. Is it possible to install both an accelerator board and a PC emulator into my STe? Would such an installation cause problems in upgrading my RAM to 2Mb?

2. Does a PC emulator include being able to use PC CD-ROM software and hardware?

3. Is it possible to buy graphics cards for the ST? Would these be compatible with a PC emulator, enabling the use of an SVGA monitor with PC software?

4. Could you please give me some guidance on the various component parts to a hard drive? What is a Link?

M. Woodstock, Birmingham

You're busy this month, Mr.
Woodstock! The STe has always
been a problem with accelerators
though System Solutions have just
the job in the form of their PAK
series of 68030 processor-based
boards starting at £299. They
have also recently taken stock of
the T28 STe series at £199.

As far as PC emulators are concerned, the only ones still supported in the UK are Compo's PC Speed (an old XT emulator at £69) and AT Speed (a 286 emulator costing £129). Unfortunately, as they both need to fit onto the 68000 chip itself, you will find it impossible to get them both in the same case. Something like System Solutions' Desktopper, a replacement case with more room inside, should do the job though. Neither board would interfere with your memory upgrade plans.

On the subject of graphics cards and CD ROMs, you can add both to your STe. System Solutions again has a good range of graphics cards, starting with an earlier version of the Matrix card on special offer at £229, going all the way up to the latest true colour model at £999. Any SCSI-2 compatible CD-ROM drive will work with your STe too, as long as you have an external host adapter such as The Link or Translator.

The bad news is that neither can be used with a PC emulator as the current PC Speed and AT Speed models have their own built-in graphics modes and cannot access the graphics card or the STe's ACSI port except to access a hard drive. The best screen resolution you can get is monochrome VGA (640 by 480) or colour CGA (320 by 200).

You'll find more information on hard drives in last issue's "Buying Time" but essentially you need a case, a bare SCSI drive mechanism, a power supply and host adapter, which is an interface designed to translate the Atari's ACSI commands into the standard SCSI set that the drive will understand. The easiest ones to use, and generally the cheapest, are external ones, of which The Link is but one option.

Having answered your queries, I'd like to offer some advice. If you really need to run heavyweight PC software like Windows, buy a PC. **Emulators are really only suitable** for running older DOS-based programs. Better still, to keep your investment in Atari software, why not upgrade to a 4Mb Falcon with hard drive? You will have more memory, a much faster processor, space to add an emulator (Compo's Falcon Speed 286 board at £199) that will happily run colour VGA software and even Windows, a built in hard drive and a superb true colour machine into the bargain. Andrew Wright

DISK DISASTER

A few months ago I bought a second-hand STe (TOS 1.06) which functions perfectly well once programs are safely loaded, but periodically seems to corrupt the floppy disk in drive A making it unreadable. When trying to reformat this disk for re-use with Fastcopy 3, the formatting may fail or, more frequently, seems to be successful but Fastcopy warns that it cannot write the "FATS". I have also

cannot write the "FATS". I have also had a problem with the disk drive failing to read a new disk after a disk swap on occasions, which I have tried to correct with a PD fix called F.M.C. (Force Media Change).

I have, with a friend's help, tried three alternative drives in the computer, but with no real improvement. It is nerve-wracking waiting for another disk to be corrupted without

warning!

Can you please offer any advice or suggestions as to the possible causes of this problem? I should mention that I recently fitted one of your 2Mb upgrades. My MMU chip appears to have the number C101643-011, 1988. Is it possible that this is one of the machines that is not easily upgraded?

Colin Hudson, Co. Down

You appear to have two problems that are probably not related. The problem where disk swaps are not recognised is a well-known "feature" of some disk drives.

Atari, in its infinite wisdom, did not correctly implement the disk detect circuitry built into most disk drives, relying instead on watching the write protect line. Some disk

READERS' HINTS

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- send one of your tips to

ST Review!

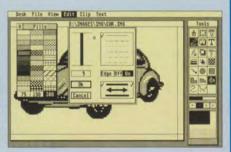
The only printer drivers included with the excellent *Touch-Up* program are for the Epson FX80 and LQ800. So what happens if you have a DeskJet? Migraph can supply you with another 20 printer drivers, including one for the DeskJet – at a cost of \$34.95 plus

shipping!

But there's a simpler solution – use an alternative GDOS-based program (I am using WordFlair) and "borrow" the DJS.SYS file. There is no need to alter the ASSIGN.SYS file in Touch-Up. Open up the Touch Up folder and change the file DEFAULT.REM to .REX or something similar and then import the DJS.SYS file and rename it to DEFAULT.REM. With these alterations, you will now be able to print out using the supplied Touch-Up fonts to the DeskJet at 300dpi.

R. E. Golding, Kent

Lack of drive – but there's an easy remedy for those who want to print to a DeskJet from Touch-Up...



If you want to quickly make a back-up copy of a file, you can use the desktop's "overwrite" warning. Make sure that you have the "Confirm Overwrites" desktop option selected. Select the file you wish to back up, say LETTER.DOC, and drag it on top of itself. The desktop will then put up an alert box allowing you to rename the copy. Give it a new name such as LETTER.BAK and click on "OK". The only thing to watch out for is that there is enough space for both files on the disk: if there isn't, the desktop will inform you.

John Davis, Kent



Brisk back-up – the quickest way to duplicate a file is to use the desktop's "overwrite" warning...

drives "rattle" this line whenever a disk is removed and re-inserted; some don't. The ones that don't can allow the ST to think that the original disk is still in place, so whenever a file is changed the original disk's directory is put on the new disk with catastrophic results!

The PD fix doesn't really seem to fix this problem totally and the only real cure is to use the correct floppy drive mechanisms. Sony, Epson and Teac seem to work properly but variations can occur even across their ranges. Be wary

of cheap external drives as some of these use incorrect mechanisms and are best avoided.

Your second problem of disk corruption could have various causes. Try running with your original memory boards in place to see if the fault is RAM related. Is there an external disk drive connected? This could be interfering with the internal one. Another possibility is a defective MCU (Memory Control Unit) chip that is having trouble with DMA transfers, but replacing this 144-pin monster is nigh on impossible. Paul Rossiter



LETTERS

Your chance to speak to the editor – and receive a cheque for £25 for the letter of the month...

JUST A FIGMENT

Shareware is great isn't it! But how many times have we seen this scenario: a great new idea is released but it's let down by its presentation. Another programmer thinks: "that's a great new idea but shame about the presentation", and goes on to do a rewrite.

This is good, but something has been lost in the translation, so someone else refines it further and so on, until we finally get to the stage where it's perfect but it's no longer a great new idea – it's just another rehash of that cranky old title which was highly original but let down by its presentation!

What would have happened if all the people who'd had a hand in getting to that final, perfect state, could have sat around a table and sorted it out to start with? How many original ideas will never see the light of day because the originator couldn't put it together? If that person had been able to get help in certain problem areas, the end product could have been a world beater.

How about this for an idea. I am setting up Figments Of An Imagination, a new company that can help to get top quality titles put together first time around, By creating a large central database of programmers, artists, musicians and designers from the public domain and pooling their skills, I believe we can take an exciting new step in home-coded software.

We will also be able to instigate "in-house" projects, by picking the best people in their fields from around the country and sharing out any profits on a percentage-based royalties scheme. As we will be in the most unique position of knowing a large number of skilled computer users, we can also provide a freelance agency service to independent or even major software houses, if required.

If you're waiting for a catch, I'm happy to say that there isn't one. Membership to Figments costs nothing and all information stored is for internal use only and will be deleted as people leave. We will even act as go-betweens in all situations.

This is a valuable and worthwhile venture. There is a lot of talent out there, and if it is co-ordinated, it can be good for software as a whole. The overall success of *Figments* depends on the response I receive from *ST Review* readers, programmers, artists – anyone who has had an idea and would like to see it produced. For more details and a membership form, write to me care of *ST Review*, enclosing a stamped-addressed

envelope. Please don't include any disks, as no details will be stored at this stage, but if you have any ideas as to how we could improve the services then let me know. I look forward to hearing from your readers.

D. Martin, Kent

Sounds interesting – all received ideas will be passed on to Mr. Martin and we'll keep you informed of the response...



GOT SOMETHING TO SAY?

5T Review is your magazine and putting pen to paper gives you direct contact with us. As editor, I read every letter that you send and carefully select the ones for publication. I receive far more letters than can be printed, so make yours interesting if you want to see it in these pages.

It may simply be that you have a constructive criticism about an article in ST Review, or that one or our columnists has inflamed you with his honesty. Whatever the reason, drop a line to me, Vic Lennard, at:

Point Of View, Atari ST Review, Europa House, Adlington Park, Macclesfield SK10 4NP.

Please do not send stamped addressed envelopes; personal replies cannot be entered into. All mail received is considered for publication unless otherwise stated and we reserve the right to edit letters where necessary without altering the context.

DON'T SPOIL IT NOW...

Come on Vic – even you've got to admit that £4.25 is expensive for *any* magazine let alone one in a declining market such as ours. And while I appreciate that you've gone back to two cover disks, why the sudden interest in games? It's not as though ST Review has a history of covered

interest in games? It's not as though ST Review has a history of covermounting them.

You have the best editorial coverage of any UK ST mag with just the right blend of reviews, features and tutorials. It's taken you a long time to achieve this – please don't spoil it now...

Roger Fisher, Doncaster

Rather than simply say that £4.25 is a lot of money for a magazine, Roger, I'd prefer to look at what else this could buy. A single trip to the cinema? Not quite. A medium-sized pizza for supper? Possibly. A day ticket around London Underground? Just about. But surely it comes down to what value you place on a magazine like ST Review.

In many respects, we save you money. By previewing new products before they appear, we make sure that you are kept aware of what is in store for your computer. By reviewing programs as soon as they are on the market, we ensure that you are in receipt of the full facts before you spend your money on products for your ST. No other ST magazine fights as hard as we do in this respect – we often beat the competition by several months where major reviews are concerned. In many respects, ST Review is the only magazine that any ST owner needs to buy.

The recent price rise to £3.75 was the first since Europress took over the magazine back in May 1993, some 18 months ago. The extra twenty-five pence has been more than eaten up in production costs. By having a final price of £4.25, it allows us to include a second cover disk – and if there are an insufficient number of cover disk programs for a particular issue then there will be a single disk and a price of £3.75.

I don't agree with you that ST Review has no history of cover mounting games – some 16 games and game demos were included with our first 12 issues! With the demise of ST User, we now intend to take up the mantle and provide coverage for games players as well, but not at the cost of the serious user who has come to rely on ST Review. To this end, this issue has eight extra pages – in fact, we're currently the largest ST mag in the UK – most of which are dedicated to ST Action. But there are the same number of pages covering the more serious editorial.

From your letters, many of you believe that ST Review's editorial blend is just about right. Please accept my deepest assurances that this will not change – certainly not while I'm editor.



Heavy on the bytes – a CD-ROM may have over 600Mb of data but as an ST Review cover-mount? No way!

OVER THE SEA

I just finished reading the letter (July 1994) from the reader who wanted 600Mb of free software on a CD-ROM disc that would accompany your magazine every month. I think it's a great idea – do you think it would also be possible to add a couple of hundred pages of more info to your mag at the same time!

Seriously though, I have read some of the letters from your readers who want more, more, more! I guess this is a natural reaction, but I just wanted to let you know that I buy your magazine at every opportunity here in Canada, and I think it's an excellent source of information about Atari. I think it has incredible value for money and I wish you the best of luck at a time when the user base is dwindling.

Your glossy magazine is so welcome here. The rich, colourful and information-filled pages leave me with a sense of belonging to a computer that can still be thriving and vibrant. The cover disks are normally

of excellent calibre, and so is the quality of articles in your magazine. Good luck now and always.

T. Wilkinson, Canada

Thanks for the support. Sometimes we forget that the UK market has three glossy ST mags while Germany only has one and the States none at all...

DATA DESTRUCTION

I'm intrigued. My computer is ill. The disease is Signum BPL "A" of the hard drive boot-up mechanism. Painful. Unfortunately, I didn't have my computer vaccinated as I hadn't owned it for long. I've been looking for a port at the back of the computer so that I can insert a thermometer but have found nothing. I've sent off for the medication, alas not free on prescription, the trusty TCP (*UVK v6*) and I have to hope that it will be able to scrape off the worst of this infection.

What a bizarre concept the computer virus is. It's an extraordinary phenomenon, brought about by technological pirates. What do these machine code evil-doers hope to achieve by dreaming up new ways to obliterate files? Perhaps these cyber cowboys should be arrested and locked away without their toys! What

can one do, other than buy the mandatory binary weedkillers – or *UVK* – and hope for the best? Do we have to bow down to these viral buccaneers and keep on checking our disks for fall-out? Something must be done but by whom and how I do not know – I'm just a novice to this computing game.

If any electronic disease-manufacturers are reading this letter, may I urge you to take up another hobby. If you want to do some damage and maim people and their property, become a traffic warden, a European regulations inspector or a member of the cabinet...

J. Cary, Bath

The Signum/BPL virus is the most common of its kind on the ST - but it cannot be transmitted to your hard drive. As you appear to think that it's affected your "boot-up mechanism", I can only assume that your hard drive no longer springs into life. This is most likely to be down to a corrupted boot sector which means that you will probably have to reformat your hard disk. Find the utilities disk and manual that came with your hard drive and check out the relevant section and program. Very few of the ST's older viruses

can affect a hard drive, but there are one or two modern-day variants that most certainly can.
You've chosen the right virus detection and destruction utility – UVK is the best, which is why we sell it through our Offers pages.
Check every disk of unknown origin – hell, if you're really concerned, check every single disk before you place it in your drive.

I'm not certain of the legal situation concerning computer viruses: perhaps a knowledgeable reader can enlighten us. I also find it very difficult to understand why anyone would wish to create a virus with the express intent of damaging data. Maybe someone in that profession would like to anonymously drop me a line...

CONTACT GAME

I have tried a couple of times in vain to get a copy of the book MIDI & Sound Book For The ST from the FaST Club and I now understand that it is out of print. I would appreciate it if you would ask your readers if anyone has a copy they would like to sell to me.

L. Russell, Kent

I have recently taken up computing with a 1Mb Atari STe. I have only one regret – I cannot purchase *Autoroute* for the machine. I understand that the software manufacturer no longer produces this disk for the Atari so is there any reader with a working copy of the program who is willing to sell it to me?

M. V. Edwards, Gloucestershire

If anyone has a copy of either of these then please drop me a line – I'll put you in touch.



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